Owner's manua

Color LCD Display

• Radio mode: FM1 98.1MHz Pch 1 (band/frequency/preset No.)

• RDS mode: FM1 CLASSICS Pch 1 (band/PTY name being received/preset No.)

• DAB mode : M1 CLASSICS Pch 1 (band/PTY name being received/preset No.)

• DVD changer mode : D2 T02 C002 01:08:20 (disc No./title No./chapter No./ playback time)

• DVD video mode : **T01 C003 00:08:20** (title No./chapter No./playback time)

• Video CD mode : **T01 00:01:18** (track No./playback time)

• MP-3 mode : **F001 T001 00:04:07** (folderNo./track No./playback time)

: **TRACK 02 04 : 07** (track No./playback time) CD mode

• CD/MD changer mode: **D02 T02 00 : 45** (disc No./track No./playback time)

 TV mode : TV1 **28CH** Pch 1 (band/channel/preset No.)

 VISUAL mode : VISUAL 1 (band)

Radio/RDS/DAB/TV mode

: **PROGRAM** • WEST COAST (station name)

• CD changer mode : **USER TITLE** > **SHINE** (user title)

· CD TEXT in CD changer mode

: DISC TITLE > SHINE (disc title)

: TRACK TITLE > Time has come (track title)

: ARTIST > Time has come (artist)

MD changer mode : DISC TITLE > SHINE (disc title)

: TRACK TITLE > Time has come (track title)



MOTION/SPRITE pattern display

— CT(Clock time)

PTY interrupt setting genre name

MANU : Manual indication

· LD : Loudness indication

When the 5.1ch Surround Decoder (DVH923) is connected, the program format of the digital input signal (for example, "3/2+LFE") is displayed.

· BEQ

: Beat-EQ indication

When the 5.1ch Surround Decoder (DVH923) is connected, the signal format of the digital input signal (for example, "Dolby D") is displayed.

AUTO: This indication is displayed when the Auto volume sensitivity is set to any setting position other than OFF.

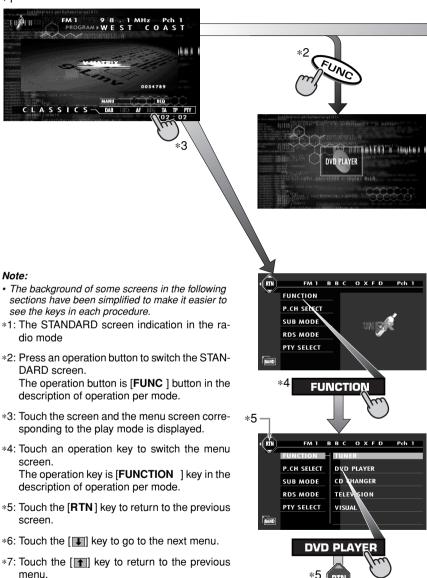
• DAB : DAB indication • INFO : INFO indication · AF : AF indication • **REG** : REG indication TA : TA indication · TP : TP indication

· PTY : PTY indication

9

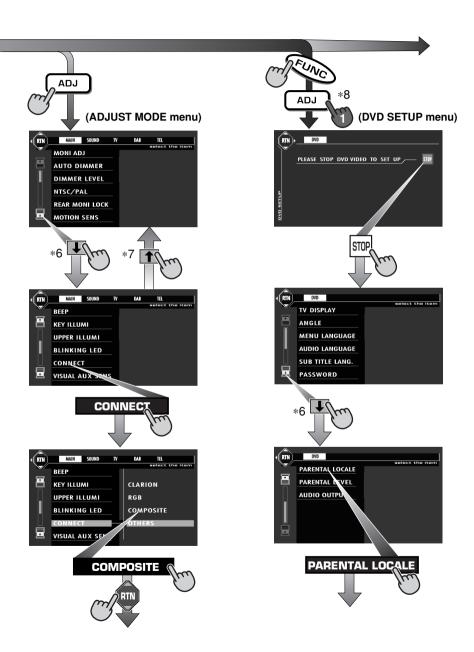
5. OUTLINE OF BUTTON AND TOUCHKEY OPERATION WHEN THE DISPLAY IS OPEN

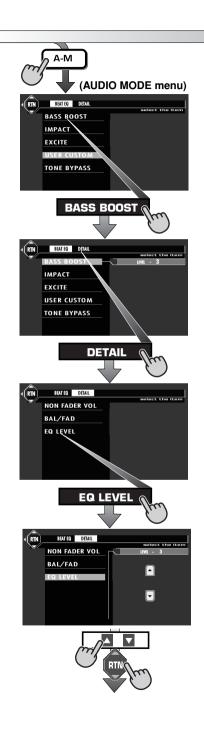
*1

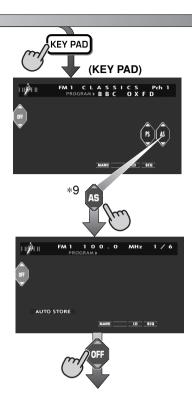


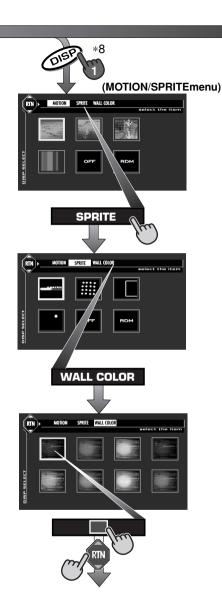
longer.

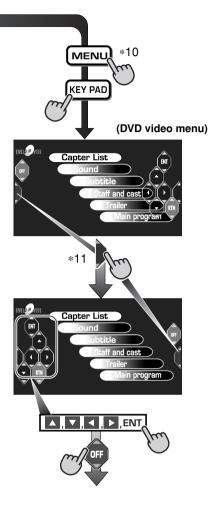
*8: This icon [] is displayed to indicate that the button should be held down for 1 second or









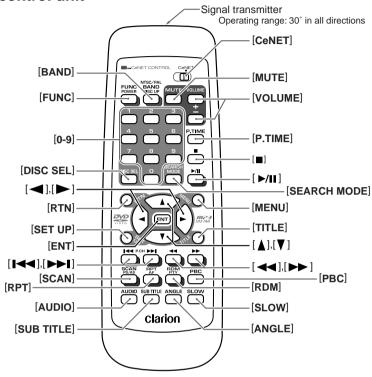


Notes:

- *8: This icon [) is displayed to indicate that the button should be held down for 1 second or longer.
- *9: This shows a KEY PAD selection example in the radio mode.
- *10: Use this button during DVD, video CD and MP-3 playback.
- *11: When the KEY PAD is difficult to view, press the touch key on the right (left) side of the screen to move it to the other side of the screen.

6. REMOTE CONTROL

Remote control unit



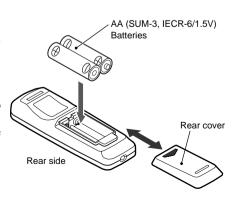
Inserting the Batteries

- 1. Turn the remote control unit over, then slide the rear cover in the direction of the arrow.
- 2.Insert the AA (SUM-3, IECR-6/1.5V) batteries that came with the remote control unit facing in the directions shown in the figure, then close the rear cover.

Notes:

Using batteries improperly can cause them to explode. Take note of the following points:

- · When replacing batteries, replace both batteries with new ones.
- Do not short-circuit, disassemble or heat batteries.
- Do not dispose of batteries into fire or flames.
- Dispose of spent batteries properly.



Functions of Remote Control Unit Buttons

Shared modes

[FUNC] button

· Switches among radio, TV,etc. * Can not turn power on or off.

[VOLUME] button

· Increases and decreases volume.

[MUTE] button

Turns mute on and off.

[CeNET] switch

· For operating this unit, switch this switch to the CeNET position.

● Radio (RDS)/TV/DAB mode

[BAND] button

Switches reception band.

[DISC SEL] button

· Press to display the P.CH SELECT screen.

[**|**◀◀], [▶▶**|**] buttons

 Press to select the next higher or lower preset channel in radio and TV/DAB modes.

[◀◀], [▶▶] button

· Press to select the next higher or lower frequency in radio and channel in TV/DAB modes.

[SCAN] button

- Press to perform preset scans in the radio, TV modes.
- Press to perform service scan in the DAB modes.
- Hold down to perform the auto store operation in the radio and TV modes.

[RPT] button

· AF function on and off. When pressed and held for 1 second: REG function on and off.

[RDM] button

· PTY standby mode on and off.

DVD player mode

[BAND] button

- · Press to return to the first chapter in DVD video mode.
- Press to return to the first track in CD/MP-3 mode or video CD mode with the PBC function turned off.

[P.TIME] button

- · Press to turn on and off the playtime display in the DVD video and video CD mode.
- Press and hold this button for 1 second or longer to switch the playback status display contents.

[] button

· Press to stop video playback in DVD video and video CD mode.

[▶/II] button

Press to play or pause video and audio media.

[0 - 9] button

- Press to enter DVD video chapters in the KEY PAD screen.
- · Press to set the track number of the Video CD with the PBC function turned off, CD track number or MP-3 track number in the KEY PAD screen.

[SEARCH MODE] button

· Press to display the KEY PAD operation screen.

[RTN] button

 Press to switch the screen display while the MENU screen is being displayed. However, it may occur that this button operation dose not work on some discs.

[MENU] button

- Press to display menu stored on video disc.
- . MP3: Returns the cursor to the default position and displays the files (track) select screen.

[SET UP] button

- · Press to display the menu for setting audio features during DVD video playback.
- · Press and hold this button for 1 second or longer to show the DVD SETUP menu.
 - * If you want to select a menu after the SETUP menu is displayed, touch the operation keys on the menu screen.

[TITLE] button

· Press to display the title screen on DVD video discs. Some discs do not display the title screen.

$[\blacktriangle], [\blacktriangledown], [\blacktriangleleft], [\blacktriangleright]$ button

· Press to select menus and other items during DVD video/MP-3 playback.

[ENT] button

· Press to confirm numerics entered in the KEY PAD operation screen.

[I◄◀] [▶▶I] buttons

- Press to select the next higher or lower chapter number in DVD video mode.
- Press to select the next higher or lower track numbers in CD/MP-3 mode or video CD mode with the PBC function turned off.

[◀**◀**] [▶▶] button

 Hold down to perform fast-forward and fastbackward.

[SCAN] button

 Press to perform chapter scans in DVD video mode and track scans in CD/VIDEO CD (PBC: OFF) mode. Press to perform track scan and hold down to perform folder in MP-3 mode.

[RPT] button

 Press to perform chapter repeat in DVD video mode and track repeat in CD/VIDEO CD (PBC: OFF) mode. In the MP-3 mode, press to perform track repeat and hold down to perform folder repeat.

[RDM] button

 Press to play tracks at random in CD/VIDEO CD (PBC: OFF) mode. In the MP-3 mode, press to play tracks at random and hold down to play folders at random.

[PBC] button

 Press to turn on and off the PBC function in video CD mode.

If the button is pressed and held for 5 seconds or longer, the DVD video player parameter settings are returned to the factory default settings.

[AUDIO] button

 Press to switch on the AUDIO function in DVD video and video CD modes.

[SUB TITLE] button

· Press to display subtitles in DVD video mode.

[ANGLE] button

 Press to turn the ANGLE function on and off in DVD video mode. (This button is available only on multiple angles DVDs.) (This button is available only on multiple angles DVDs.)

[SLOW] button

 Press to perform slow playback in DVD video/ VIDEO CD mode.

● CD/MD changer mode

[BAND] button

· Press to switch discs.

[DISC SEL] button

· Used to change the disc.

[| / | | button

Press to play and pause the media.

[0 - 9] buttons

Press to enter track numbers in the KEY PAD screen.

[SEARCH MODE] button

Press to display the KEY PAD operation screen.

[I◄◀] [▶▶I] buttons

 Press to select the next higher or lower playback track.

[**◄4**] [**▶▶**] button

 Hold down to perform fast-forward and fastbackward.

[SCAN] button

 Press to perform track scan and hold down to perform disc scan.

[RPT] button

 Press to perform track repeat and hold down to perform disc repeat.

[RDM] button

 Press to play tracks at random and hold down to play folders at random.

DVD changer mode

[BAND] button

· Press to switch discs.

[DISC SEL] button

· Used to change the disc.

 Other button operations in this mode are the same as those in DVD player mode.

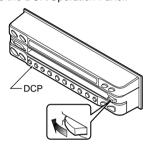
7. DCP

The control panel can be detached to prevent theft. When detaching the control panel, store it in the DCP (DETACHABLE CONTROL PANEL) case to prevent scratches.

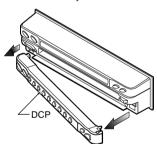
We recommend taking the DCP with you when leaving the car.

Removing the DCP

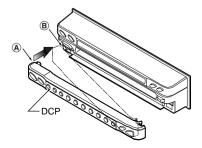
- 1. Turn the power off.
- 2. Slide the [**RELEASE**] lever leftward to release the DCP/Operation Panel.



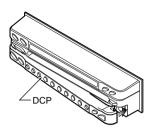
3. Pull the DCP toward you and remove it.



Attaching the DCP



Press the right side of the DCP carefully to fit it in place.



Press the [FUNC] button to turn on the power.

ACAUTION

- The DCP can easily be damaged by shocks. After removing it, be careful not to drop it or subject it to strong shocks.
- If the Operation Panel is kept open, the DCP may drop due to vibration of the car. This results in damage to the DCP. So close the Operation Panel or remove the DCP to store into the case.
- The DCP is an extremely important part. Be careful not to damage it by pressing on it with fingernails, screwdrivers, etc.

Note:

• If the DCP is dirty, wipe off the dirt with a soft, dry cloth only.

8. CAUTIONS ON HANDLING

LCD panel/Generalities

For a longer service life, be sure to read the following cautions.

- Be sure to store the LCD panel inside the main unit when parking the car outdoors for long period of time. The LCD panel will operate properly in a temperature range of 0 to 60°C.
- Don't allow any liquids on the set from drinks, umbrellas etc. Doing so may damage the internal circuitry.
- · Do not disassemble or modify the set in any way. Doing so may result in damage.
- Do not draw the LCD panel out and use it as a tray. Also, subjecting the LCD panel to shocks may result in breakage, deformation or other damage.
- Do not let cigarettes burn the display. Doing so may damage or deform the cabinet.
- · If a problem should occur, have the set inspected at your store of purchase.
- · Do not insert objects or poke in the space between the LCD panel and the main unit when the panel is tilted.

- · Do not place anything on the display when the panel is tilted.
- The remote controller may not work if the remote control sensor is exposed to direct sunlight.
- · In extremely cold weather, the display movement may slow down and the display may darken, but this is not a malfunction. The display will work normally when the temperature increases.
- Small black and shiny spots inside the LCD panel are normal for LCD products.
- The LCD panel may stop temporarily when it opens or closes, when the engine stops or when it is cold.
- The touchkeys on the display operate when slightly touched. Do not press the touchkey screen with much force.
- · Do not push the case surrounding the touchkey panel with much force. This may cause malfunctioning of the touchkeys.

Cleaning

Cleaning the cabinet

Use a soft, dry cloth and gently wipe off the dirt. For tough dirt, apply some neutral detergent diluted in water to a soft cloth, wipe off the dirt gently, then wipe again with a dry cloth.

Do not use benzene, thinner, car cleaner, etc., as these substances may damage the cabinet or cause the paint to peel. Also, leaving rubber or plastic products in contact with the cabinet for long periods of time may cause stains.

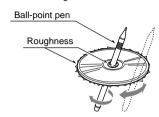
· Cleaning the LCD panel

The LCD panel tends to collect dust, so wipe it off occasionally with a soft cloth. The surface is easily scratched, so do not rub it with hard objects.

Handling Discs

Handling

 New discs may have some roughness around the edges. If such discs are used, the player may not work or the sound may skip. Use a ball-point pen or the like to remove any roughness from the edge of the disc.



- Never stick labels on the surface of the disc or mark the surface with a pencil or pen.
- Never play a disc with any cellophane tape or other glue on it or with peeling off marks. If you try to play such a disc, you may not be able to get it back out of the DVD player or it may damage the DVD player.
- Do not use discs that have large scratches, are misshapen, cracked, etc. Use of such discs may cause misoperation or damage.
- To remove a disc from its storage case, press down on the center of the case and lift the disc out, holding it carefully by the edges.
- Do not use commercially available disc protection sheets or discs equipped with stabilizers, etc. These may damage the disc or cause breakdown of the internal mechanism

Storage

- Do not expose discs to direct sunlight or any heat source.
- Do not expose discs to excess humidity or dust.
- · Do not expose discs to direct heat from heaters.

Cleaning

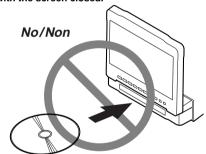
- To remove fingermarks and dust, use a soft cloth and wipe in a straight line from the center of the disc to the circumference.
- Do not use any solvents, such as commercially available cleaners, anti-static spray, or thinner to clean discs.
- After using special disc cleaner, let the disc dry off well before playing it.

On Discs

- Exercise a good precaution when loading a disc with the panel open.
- Never turn off the power and remove the unit from the car with a disc loaded.

ACAUTION

With the screen open, a driver may not see the disc insertion slot. For your safety, insert a disc with the screen closed.



9. DVD VIDEO SYSTEM

DVD video is a high-quality digital video source that provides crisp and clear images. One 12 cm disc contains either one film or four hours of music.

DVD Video Features

This unit provides the following functions in addition to the high image quality and sound quality of DVD video.

Notes:

 Some disc functions may operate differently than described in this manual.

Multi-sound function

DVD video can store up to 8 languages for one film; select the language of your preference.

· The languages stored on the disc are indicated by the icon shown below.



Multi-angle function

A DVD video that is filmed from multiple angles allows you to select the angle of choice.

· The number of recorded angles are indicated by the icon shown below.



Subpicture (subtitles) function

A DVD video can record subtitles for up to 32 languages and you can select the language of the subtitles you wish to see.

 The number of recorded subtitle languages are indicated by the icon shown below.



Multi-story function

When a DVD video contains more than one story for a film, you can select the story you wish to enjoy. The operation procedures vary with the disc: observe the instructions for selecting a story provided during playback.

Dolby digital

Dolby digital enables up to 5.1 independent multi-channel audio reproduction, the same type of surround system that is also used in movie theaters.

DTS

DTS (Digital Theater System) is a digital sound compression technique developed by Digital Theater Systems, Inc.

This low sound compression format delivers a large amount of data and makes it possible to reproduce a high quality sound.

Menu screens

Menus can be called up during DVD video playback to perform menu setting.

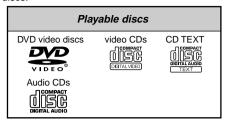
Example showing menu display



Discs

Plavable discs

This DVD video player can play the following discs.



About CD Extra discs

A CD Extra disc is a disc in which a total of two sessions have been recorded. The first session is Audio session and the sedond session Data sessioin.

Your personally-created CDs with more than 2 data sessions recorded cannot be played on this DVD video player.

Discs that cannot be played back

This DVD video player cannot play back DVD-R, DVD-RAM, DVD-ROM, CD-ROM, Photo CDs.

 Some CDs recorded in CD-R/CD-RW mode may not be usable. (Cause: disc characteristics, cracks, dust/dirt, dust/dirt on player's lens. etc.)

Note on region numbers

The DVD video system assigns a region number to DVD video players and DVD discs by sales area. DVD video players sold in the United States can play back DVD discs with the region number "ALL", "2" or any combination of numbers that also incorporate a "2".

The DVD video region number is marked on the disc jacket as shown below.







TV color system

This DVD player plays NTSC discs and PAL discs only and cannot be used for playback of SECAM discs.

About MP3 playback

This unit can play back CD-R/CD-RW discs on which MP3 music data have been recorded.

For a detailed information, see the page entitled "Listening to an MP3".

About the registered marks etc.

- This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection tecnology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.
- Manufactured under license from Dolby Laboratories.
 - "Dolby" and the duble-D symbol are trademarks of Dolby Laboratories.
- "DTS" is a registered trademark of Digital Theater Systems, Inc.

10. OPERATIONS

Basic Operations

Note: Be sure to read this chapter referring to the front diagrams of chapter "2. CONTROLS" on page 5 (unfold).

ACAUTION

When the unit is turned on, starting and stopping the engine with its volume raised to the maximum level may harm your hearings. Be careful about adjusting the volume.

· Use this unit after starting the engine.



Turning on and off the power Note:

- · Be careful about using this unit for a long time without running the engine. If you drain the car's battery too far, you may not be able to start the engine and this can reduce the service life of the battery.
- 1. Press the [FUNC] button.
- 2. The illumination and display on the unit light up. The unit automatically remembers its last operation mode and will automatically switch to display that mode.
- 3. Press and hold the [FUNC] button for 1 second or longer to turn off the power for the unit.

Note:

About the "SYSTEM CHECK"

The confirmation of connected equipment must be performed for this unit only when the wiring connection is complete and power is turned on to the unit first. When the power is supplied, "PUSH PWR" appear in the display. Press the [FUNC] button, the system check starts inside the unit. When "COMPLETE" and "PUSH PWR" appear alternately, press once again the [FUNC] button.

Selecting a mode

- 1. Press the [FUNC] button to change the mode of operation.
- Each time you press the [FUNC] button, the mode of operation changes in the following order:

Radio mode → DAB mode → DVD mode → CD changer mode → MD changer mode → DVD changer mode → TV mode → VISUAL mode → Radio mode...

* External equipment not connected with CeNET is not selected.

Adjusting the volume

- 1. Operate the [VOL] button in the direction of the + (up) or - (down) to adjust the volume;
- Increases the volume.
- Decreases the volume.
- * The volume level indicated in the display is in a range from 0 (minimum) to 33 (maximum).

ACAUTION

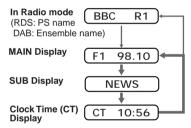
While driving, keep the volume at a level at which external sounds can be heard.

Switching the display

When the panel is closed:

1. Press the [DISP] button to select the desired display.

Each time you press the [DISP] button, the display switches in the following order:



Notes:

- Once selected, the preferred display becomes the default display. When a function adjustment such as volume is made, the display momentarily switches to that function's display, then returns back to the preferred display several seconds after the adjustment.
- If a title has been input, it is shown in the SUB display. If no title has been input, "NO TITLE" appears in the display. To input a title, refer to the subsection "Entering titles" in "Other Functions" section
- For CD, MD and TV, some special characters of the title will not be displayed on the Information Panel of the DCP. In this case, those characters will only be left blank.
- When CT data is not received, "CT-:-" appears in the display.

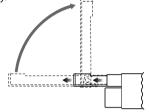
Opening and turning the display

A WARNING

- To prevent the battery from going dead, operate this unit with the engine running, if possible.
- When the liquid crystal panel is operating, be careful not to get your hand or finger caught between the panel and main unit or the instrument panel of the car.

Standing up the liquid crystal panel

Press the [OPEN] button and the liquid crystal panel comes out and stand up automatically.



* While the liquid crystal panel is opening or closing, the LED of the [FUNC] button blinks.

NOTE:

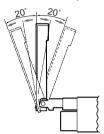
 If the liquid crystal panel stops in the middle of its operation, press the [OPEN] button to house the panel and press the button again to stand it up.
 The unit enters the same display mode as the display was turned off the last time.

Adjusting the angle, etc. of the liquid crystal panel

The angle of the liquid crystal panel or protruding amount of the panel from the mounting surface can be adjusted depending on the mounting angle of the unit or light coming into the car.

To adjust the angle

 Every time the [TILT] button is pressed, the liquid crystal panel tilts forward or backward at up to about 20 degrees. The adjusted angle is stored in memory.



NOTE:

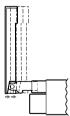
• Do not move the liquid crystal panel by hand.

To adjust the slide position

 Press and hold the [TILT] button and release when a beep is heard.

The liquid crystal panel slides forward or backward. The adjusted slide position is stored in memory.

* There are 3 adjustable positions available on this panel.



Housing the liquid crystal panel

1. Press the **[OPEN]** button and the liquid crystal panel is housed automatically.

NOTE:

 When leaving this unit unused for a long period of time or leaving your car, be sure to house the liquid crystal panel into the main unit.

Turning the liquid crystal panel horizontal (Air conditioner operation mode)

When the way the liquid crystal panel is mounted hinders the operation of the air conditioner, the position of the panel can be turned horizontal temporarily.

- Press and hold the [OPEN] button when the liquid crystal panel is upright, and release the button when a beep is heard.
- 2. The liquid crystal panel turns horizontal.
 - Press the [OPEN] button again when the liquid crystal panel is in the horizontal position, and the panel returns to the original position.
 - * Even if the button is not operated for about 10 seconds, the panel returns to the original position with a warning sound.

Turning on and off the monitor

- Pressing and holding the [MUTE] button for 1 second or longer turns the monitor off. To return to the monitor on, press the [MUTE] button once again.
 - * When a button is pressed or during security monitoring, the monitor-off mode is canceled.

Mute

 Each time you press the [MUTE] button, mute is turned on and off. "MUTE" appears when mute is turned on.

Setting the Beat EQ

 This function is enabled only when the panel is open.

This unit comes with 3 types of sound tone effect stored in memory. Select the one you prefer.

- * The factory default setting is "USER CUSTOM".
- Press the [A-M] button to change into the AUDIO MODE menu.
- When the AUDIO MODE menu is displayed, touch the key for the desirable type to select it.

• BASS BOOST : bass emphasized

: bass and treble empha-

sized

• **EXCITE** : bass and treble empha-

sized mid de-emphasized

USER CUSTOM: user custom

• TONE BYPASS : no sound effect (Beat EQ

off)

When the setting is finished, touch the [RTN] key or press the [A-M] button to return to the previous mode.

When the Beat EQ (BASS BOOST, IMPACT, EXCITE, USER CUSTOM) is set, "**B.EQ**" appears in the display.

Note:

When the separately-sold 5.1 ch Surround Decoder (DVH923) is used, the bass and treble tone adjustments cannot be made. To adjust the tone, refer to the section "5.1 ch Surround Decoder Operations".

Adjusting the non fader output volume

You can adjust the volume output from the unit's non fader output terminal.

- Press the [A-M] button, then touch the [DETAIL] key.
- 2. Touch the [NON-FAD VOL] key.
- Touch the [▲] or [▼] key to adjust to desirable level.
 - * The factory default setting is "0". (Setting range: -6 to 6)
- When the adjustment is complete, touch the [RTN] or press the [A-M] button to return to the previous mode.

Adjusting the bass

The bass gain, bass frequency (center frequency) and bass Q can be adjusted as follows.

- 1. Press the [A-M] button, then touch the [USER CUSTOM] key.
- 2. Touch the [**DETAIL**] key, then touch the [**BASS**] key.
- When the bass type selection screen is displayed, touch the key for the desirable type to select it.
- Touch the [▲] or [▼] key to adjust to desirable level.

GAIN : -6 to 8 (The factory default setting

is "**0**")

FREQ.: 50Hz/80Hz/120Hz (The factory de-

fault setting is "50")

Q : 1/1.25/1.5/2 (The factory default

setting is "1")

When the adjustment is complete, touch the [RTN] key several times or press the [A-M] button to return to the previous mode.

IMPACT

Adjusting the MID

The MID gain, MID frequency (center frequency) and MID Q can be adjusted as follows.

- 1. Press the [A-M] button, then touch the [USER CUSTOM] key.
- 2. Touch the [**DETAIL**] key, then touch the [**MID**] key.
- 3. When the bass type selection screen is displayed, touch the key for the desirable type to select it.
- Touch the [▲] or [▼] key to adjust to desirable level.

GAIN : -6 to 6 (The factory default setting

FREQ.: 700Hz/1kHz/2kHz (The factory default setting is "1k")

Q : 1.5/2 (The factory default setting is

5. When the adjustment is complete, touch the [RTN] key several times or press the [A-M] button to return to the previous mode.

Adjusting the TREBLE

The treble gain and treble frequency (center frequency) can be adjusted as follows.

- 1. Press the [A-M] button, then touch the [USER CUSTOM] key.
- 2. Touch the [DETAIL] key, then touch the [TREBLE] key.
- 3. When the bass type selection screen is displayed, touch the key for the desirable type to select it.
- 4. Touch the [▲] or [▼] key to adjust to desirable level.

GAIN : -6 to 6 (The factory default setting is "0")

FREQ.: 8kHz/12kHz (The Factory default setting is "12K")

5. When the adjustment is complete, touch the [RTN] key several times or press the [A-M] button to return to the previous mode.

Adjusting the balance/fader

- 1. Press the [A-M] button, then touch the [DE-TAIL1 kev.
- 2. Touch the [BAL/FAD] key.
- Touch the [▲] or [▼] key to adjust to the fader level.

- * The factory default setting is "0". (Adjustment range: front 13 to rear 13)
- [1 kev : Emphasized the sound from the front speakers.
- [▼] key: Emphasized the sound from the rear speakers.
- Touch the [◀] or [▶] key to adjust to the balance level.
 - * The factory default setting is "0". (Adjustment range: left 12 to right 12)
 - [] key : Emphasized the sound from the left speakers.
 - [] key: Emphasized the sound from the right speakers.
- 5. When the adjustment is complete, touch the [RTN] key several times or press the [A-M] button to return to the previous mode.

Adjusting the Beat EQ

- 1. Press the [A-M] button and select "BASS BOOST or IMPACT or EXCITE".
- 2. Touch the [DETAIL] or [LEVEL] key to display the level adjustment screen.
- Touch the [▲] or [▼] key to adjust to desirable level.
 - * When BASS BOOST is selected, you can adjust the bass in the range of -3 to 3.
 - * When IMPACT and EXCITE is selected, you can adjust the bass and treble in the range of -3 to 3.
- 4. When the adjustment is complete, touch the [RTN] key several times or press the [A-M] button to return to the previous mode.

Turning on/off the loudness

The loudness effect emphasizes the bass to create a natural sound tone. When you are listening to music at a low volume, it is recommended to use the loudness effect.

- 1. Press and hold the [A-M] button for 1 second or longer to turn on the loudness effect. When the loudness effect is turned on, "LD" lights in the display.
- 2. Press and hold the [A-M] button for 1 second or longer to turn off the loudness effect. "LD" goes off in the display.

Changing the setting of the display background

WARNING

Perform the setting of this function the car is stopped with the parking break applied.

- Press the [DISP] button for 1 second or longer to show the background setup menu.
 - * This menu can be displayed only in the radio. DVD (CD, MP3) or CD/MD changer mode and only while your car is deing driven.
- 2. Touch the setting key to show the setup display.

To set up the motion pattern

- 2-1. Touch the [MOTION] key to set a desired motion pattern.
- 2-2. Touch a desired MOTION PATTERN.

To set up the sprite pattern

- 2-1. Touch the [SPRITE] key to set a desired sprite pattern.
- 2-2. Touch a desired SPRITE PATTERN.

To set up the wall color

- 2-1. Touch the [WALL COLOR] key to set a desired wall color.
- 2-2. Touch a desired WALL COLOR.
- 3. Press the [DISP] button again or touch the [RTN] key to return to the STANDARD screen.

Radio Operations

Listening to the radio

- 1. Press the [FUNC] button and select the RA-DIO mode. The frequency or PS is displayed. * PS: Programme service name.
- Press the [BND] button and select the radio band. Each time the button is pressed, the radio reception band changes in the following order:

FM1 → FM2 → FM3 → AM (MW/LW) → FM1...

- Press the [◀] or [▶] button to tune in the desired station.
 - * When the panel is open, the same operation is also available by using the [◀] or [▶] button in the panel.

Seek tuning

There are 2 types of seek tuning: DX SEEK and LOCAL SEEK.

DX SEEK can tune in to receivable broadcast stations; LOCAL SEEK can tune in to only broadcast stations with a good reception condition.

- 1. Press the [BND] button and select the desired band. (FM or AM (MW, LW))
- Tune in to a station.
 - * If "MANU" is lit in the display press and hold the [BND] button for 1 second or longer. "MANU" in the display goes off and seek tuning is now available.
 - * If "TA" is lit in the display, TP stations are automatically sought.

DX SEEK

Press the [◀] or [▶] button to automatically seek a station.

When the [▶] button is pressed, the station is sought in the direction of higher frequencies; if the [◀] button is pressed, the station is sought in the direction of lower frequencies.

* When seek tuning starts, "DX SEEK" appears in the display.

● LOCAL SEEK

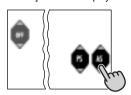
If you press and hold the [◀] or [▶] button for 1 second or longer, local seek tuning is carried out. Broadcast stations with good reception sensitivity are selected.

* When local seeking starts, "LO SEEK" appears in the display.

Selecting stations with the KEY PAD

* This function displays the KEY PAD on the screen enabling you to tune in through auto store or preset scan.

Press the [KEY PAD] button to display the KEY PAD.



To use auto store.

touch the [AS] key for about 2 seconds.

 To perform a preset scan, touch the [PS] key.

To cancel the KEY PAD display.

press the [KEY PAD] button or touch the [OFF] key.

Manual tuning

There are 2 ways available: Quick tuning and step tuning.

When you are in the step tuning mode, the frequency changes one step at a time. In quick tuning mode, you can quickly tune the desired frequency.

- 1. Press the [BND] button and select the desired band. (FM or AM (MW/LW))
 - * If "MANU" is not lit in the display, press and hold the [BND] button for 1 second or longer. "MANU" appears in the display and manual tuning is now available.
- Tune into a station.

Quick tuning:

Press and hold the [◀] or [▶] button for 1 second or longer to tune in a station.

Step tuning:

Press the [◀] or [▶] button to manually tune in a station.

Note:

 Manual tuning is cancelled if you do not operate the unit for 7 seconds or longer.

Recalling a preset station

A total of 24 preset positions (6-FM1, 6-FM2, 6-FM3. 6-AM) exists to store individual radio stations in memory. Pressing the corresponding [DIRECT] button recalls the stored radio frequency automatically.

There are 2 ways available to recall the preset station.

Using the [DIRECT] buton.

- 1. Press the [BND] button and select the desired band, (FM or AM (MW/LW))
- 2. Press the corresponding [DIRECT] button to recall the stored station.
 - * Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store that station into preset memory.

Using the [DIRECT] key.

- 1. Press the [LIST] button or touch the screen when the STANDARD screen is displayed, then touch the [P.CH SELECT] key.
- 2. Touch the corresponding [DIRECT] key to recall the stored station.
 - * You can select the desired band to touch the [BAND] key.
- 3. Touch the [RTN] key or press the [LIST] button to return to the previous mode.

Manual memory

- 1. Press the [BND] button and select the desired band. (FM or AM (MW/LW))
- 2. Select the desired station with seek tuning, manual tuning, or preset tuning.
- 3. Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current station into preset memory.

Auto store

Auto store is a function for storing up to 6 stations that are automatically tuned in sequentially. If 6 receivable stations cannot be received, a previously stored station remains unoverwritten at the memory position.

- 1. Press the [BND] button and select the desired band. (FM or AM (MW/LW))
- 2. Touch the screen switching touchkey when the STANDARD screen is showing or press the [LIST] button, the MENU screen ap-
- 3. Touch the [SUB MODE] key in the MENU screen and the [AUTO STORE] key appears in the display.
- 4. Touch and hold the [AUTO STORE] key for 2 seconds or longer.

The stations with good reception are stored automatically to the preset channels.

Radio Operations

Preset scan

Preset scan receives the stations stored in preset memory in order. This function is useful when searching for desired station in memory.

- 1. Touch the screen switching touchkey when the STANDARD screen is showing or press the [LIST] button, the MENU screen appears.
- Touch the [SUB MODE] kev in the MENU. screen and the [PRESET SCAN] key appears in the display.
- 3. Touch the [PRESET SCAN] key to start preset scan. The unit starts scanning each station for 7 seconds sequentially.
- 4. When the desired station is turned in, touch the [PRESET SCAN] key again to continue receiving that station.

RDS Operations

RDS (Radio Data System)

This unit has a built in RDS decoder system that supports broadcast stations transmitting RDS data. This system can display the name of the broadcast station being received (PS) and can automatically switch to the broadcast station with the best reception as you move long distances (AF switching), Also, if a traffic announcement or programme type information is broadcast from an RDS station, no matter what mode you are in, this broadcast is received. Additionally, if EON information is received, this information enables automatic renewal of other preset stations on the same network and interruption of traffic announcement and/or chosen program type from other stations (TP). This function is not available in some areas.

When using the RDS function, always set the radio to FM mode.

• "AF" : Alternative Frequency

• "PS" : Programme Service Name

"PTY" : Programme Type

"EON": Enhanced Other Network

• "TP" : Traffic Programme

* RDS interrupt does not function during AM radio reception or in TV mode.

AF function

The AF function switches to a different frequency on the same network in order to maintain optimum reception.

* The factory default setting is "ON".

Display the RDS menu

Touch the screen switching touchkey when the STANDARD screen is showing or press the [LIST] button, the MENU screen appears.

Switching OFF the AF function

Touch the [RDS MODE] key in the MENU screen and the [AF] key appears in the display. Touch the [AF] key and "AF ON" switches to "AF

OFF". The "AF" indicator goes off.

Switching ON the AF function

Touch the [RDS MODE] kev in the MENU screen and the [AF] key appears in the display.

Touch the [AF] key and "AF OFF" switches to "AF ON". The "AF" indicator lights.

* If the reception of the current broadcast station deteriorates durably, "SEARCH" lights in the display and the radio searches for the same programme on another frequency.

* When the reception deteriorates, the "AF" indicator flickers.

●AF function between RDS and DAB

Refer to the item of DAB Operations.

REG (Regional programme) function

When the REG function is ON, the optimum regional station can be received. When this function is OFF, if the regional station area switches as you drive, a regional station for that region is received.

* The factory default setting is "OFF".

Notes:

- This function is disabled when a national station such as BBC 2 FM is being received.
- The REG function ON/OFF setting is valid when the AF function is ON.

Turning the REG function ON

When "REG" is not lit in the display, touch the [RDS MODE] key in the MENU screen and the [REG] key appears in the display.

Touch the [REG] key and "REG OFF" switches to "REG ON".

"REG" lights in the display.

Turning the REG function OFF

Touch the [RDS MODE] key in the MENU screen and the [REG] key appears in the display.

Touch the [REG] key and "REG ON" switches to "REG OFF".

"REG" in the display goes off.

Manually tuning a regional station in the same network

Note:

- This function can be used when a regional broadcast of the same network is received.
- 1. This function is valid when the AF function is ON and the REG function is OFF.
- 2. Press any one of the [DIRECT] buttons to call out a regional station.
- 3. Each time you press the same [DIRECT] button. the unit switches from a local station to the other on the same network.

TA (Traffic Announcement)

In TA standby mode, when a traffic announcement broadcast starts, the traffic announcement broadcast is received as top priority regardless of the function mode so you can listen to it. Traffic programme (TP) automatic tuning is also possible.

- * RDS interrupt does not function during AM radio reception or in TV mode.
- * This function can only be used when "TP" is lit in the display. When "TP" is lit, this means that the RDS broadcast station being received has traffic announcement programmes.

Setting TA standby mode

If you press the [TA] button when only "TP" is lit in the display, "TP" and "TA" light in the display and the unit is set into TA standby mode until a traffic announcement is broadcast. When a traffic announcement broadcast starts, "TRA INFO" appears in the display. If you press the [TA] button while a traffic announcement broadcast is being received, the traffic announcement broadcast reception is cancelled and the unit goes into TA standby mode.

Cancelling TA standby mode

With "TP" and "TA" are lit in the display, press the [TA] button. The "TA" in the display goes off and TA standby mode is cancelled.

* If "TP" is not lit, pressing the [TA] button searches for a TP station.

Searching for a TP station

When "TP" is not lit, if you press the [TA] button, "TA" lights in the display and the unit automatically searches a TP station.

Note:

- If a TP station is not received, the unit continues the search operation. Pressing the [TA] button again makes the "TA" indicator go off and stops TP station searching.
- The same operation can be performed by the touch key on the screen instead of the [TA] but-

Touch the screen switching touchkey when the STANDARD screen is showing or press the [LIST] button. the MENU screen appears.

Touch the [SUB MODE] key in the MENU screen and the [TA] key appears in the display.

Auto store function for TP stations

You can automatically store up to 6 TP stations into preset memory. If the number of TP that can be received is less than 6, broadcast stations already stored in memory are left without being overwritten.

- With "TA" lit in the display, touch the [SUB MODE] key in the MENU screen to select the [AUTO STORE] key.
 - Touch the [AUTO STORE] key for 2 seconds or more.
- The TP stations with the good reception condition are stored into preset memory.
- * Even if you select FM1 or FM2, a TP station is stored into memory for FM3.

PTY

This function enables you to listen to a broadcast of the selected programme type when it starts, even if the unit operates on a function mode other than radio.

- * RDS interrupt does not function during AM radio reception or in TV mode.
- * Some countries do not yet have PTY broadcast.
- In TA standby mode, a TP station has priority over a PTY broadcast station.

Selecting PTY

 Touch the [PTY SELECT] key in the MENU screen and the [PRESET] key appears in the display.

Touch the [PRESET] key and the unit goes into PTY select mode.

- Press any one of the [DIRECT] key to select a desired PTY.
 - * Below are the factory default settings stored for the [DIRECT] key.

Preset	PTY item	
number	ENGLISH	Contents
1	News	News
2	Info	Information
3	Рор М	Pop music
4	Sport	Sport
5	Classics	Classics
6	Easy M	Easy listening music

The PTY select mode is cancelled automatically 7 seconds after a PTY is selected.

Cancelling PTY standby mode

Touch the [RDS MODE] key in the MENU screen the [PTY] key appears in the display.

Touch the [PTY] key and "PTY ON" switches to "PTY OFF".

The indicator "**PTY**" goes off and PTY standby mode is cancelled.

● Cancelling PTY interrupt broadcast

Touch the [PTY] key ("PTY ON" switches to "PTY OFF"), during the PTY interrupt broadcast to display the subsidiary, the PTY interrupt is cancelled and the unit returns to PTY standby mode.

PTY seek

- Touch the [PTY SELECT] key in the MENU screen, touch the [PRESET] key or [ITEM SELECT] key.
- 2. Touch a desired PTY.
- Press the [▶] or [◄] button. If you press
 the [▶] button, the unit seeks a PTY broadcast moving up the frequencies; if you press
 the [◄] button, it seeks moving down the
 frequencies.
 - * If no station with the selected PTY broadcast can be received, the unit returns to the MAIN mode.

PTY preset memory

 Touch the [PTY SELECT] key in the MENU screen and the [ITEM SELECT] key appears in the display.

Touch the [ITEM SELECT] key and the PTY select mode is turned on.

- 2. Select a desired PTY.
- Touch the [PRESET] key to show the preset screen. Keep touching the channel indication in the preset screen for 2 seconds or longer to execute preset channel memory.
- If you press and hold any one of the [DI-RECT] buttons for 2 seconds or longer, the selected PTY is stored into that preset channel memory.
 - * The 29 types of PTY below can be selected.

PTY item			
ENGLISH	Contents		
News	News		
Affairs	Current Affairs		
Info	Information		
Sport	Sport		
Educate	Education		
Drama	Drama		
Culture	Culture		
Science	Science		
Varied	Varied		
Рор М	Pop Music		
Rock M	Rock Music		
Easy M	Easy Listening Music		
Light M	Light Classical Music		
Classics	Serious Classical Music		
Other M	Other Music		
Weather	Weather		
Finance	Finance		
Children	Children's Programmes		
Social	Social Affairs		
Religion	Religion		
Phone in	Phone In		
Travel	Travel		
Leisure	Leisure		
Jazz	Jazz Music		
Country	Country Music		
Nation M	National Music		
Oldies	Oldies Music		
Folk M	Folk Music		
Document	Documentary		

Emergency broadcast

If an emergency broadcast is received, all the function mode operations are stopped.

- "ALARM" appears in the display and the emergency broadcast can be heard.
- * RDS interrupt does not function during AM radio reception or in TV mode.
- Cancelling an emergency broadcast

Touch the [RDS MODE] key in the MENU display and the [AF] key appears in the display. Touch the [AF] key and emergency broadcast reception is cancelled.

Switching the PTY display language Note:

· This function is enabled only when the panel is open.

You can select one of 4 languages (English, German, Swedish or French) for the PTY displayed in the display.

- * The factory default setting is "ENGLISH".
- 1. Press the [ADJ] button to show the ADJUST MODE menu
- 2. Touch the [▼] key twice to select "PTY LAN-GUAGE".

Touch the desired language key to change the setting.

3. Press the [ADJ] button. The unit returns to the previous mode.

Volume setting of TA, emergency broadcast (ALARM) and PTY

The volume for TA, ALARM and PTY interrupts can be set during TA, ALARM or PTY interrupt.

- * The factory default setting is "15".
 - During a TA, ALARM or PTY interrupt, operate the [VOL] button upward or downward to set the volume to the desired level (00 to 33).
- * When the TA, ALARM or PTY interrupt ends, the volume returns to the level it had before the interrupt.

DVD Video Player Operations

Changing DVD system settings

Notes:

- If the SETUP operation is performed in the middle of video CD/DVD video play, the disc plays from the beginning.
- Various settings of the SETUP menu cannot be made with the remote control unit.

Selecting the DVD SETUP menu

- Press and hold the [ADJ] button for 1 second or longer. DVD SETUP stand-by screen is displayed.
- 2. Press the [STOP] key to display the DVD SETUP menu.



3. Touch the [] key. Touch the [] key to return to the previus menu.



Touch the [RTN] key to return the previous mode.

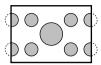
Setting up the screen size

Set up the screen size according to the rear view monitor which is connected to this unit.

- Following the steps 1 to 2 in "Selecting the DVD SETUP men u", touch the [TV DIS-PLAY] key.
- 2. Touch the [N PS], [N LB] or [WIDE] key to select a desired size to set it.
 - * The factory default setting is "N PS ".

The color of the selected item changes.

- When watching through a conventional type of the rear view monitor (4:3)
 - N PS: The leftmost and rightmost areas of the screen are cut off.



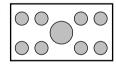
This function allows displaying the important part of image fully on the screen. In some cases, image is displayed while being panned (scrolled).

 N LB : A black zone is created in the top and bottom areas of the screen.



This method displays Cinema Scope and Vista Vision images without cutting them off by creating a black zone on the top and bottom gaps.

- When watching through a wide type of the rear view monitor (16:9)
 - WIDE :



Touch the [RTN] key to return previous mode.

Setting up the angle mark display

You can set up so that the angle mark appears on scenes where the angles can be switched.

- 1. Following the steps 1 to 2 in "Selecting the DVD SETUP men u", touch the [ANGLE] key.
- Touch the [ON] or [OFF] key to select "ON" or "OFF".
 - * The factory default setting is "OFF".
- Touch the [RTN] key to return previous mode.

Setting up the disc menu language.

- 1. Following the steps 1 to 2 in "Selecting the DVD SETUP menu". touch the [MENU LAN-GUAGE] key. Each time you touch the [MENU LANGUAGE] key, you can switch the language list display.
- 2. Touch the key to select a desired language to set it.
 - * The factory default setting is "ENGLISH".
- 3. Touch the [RTN] key to return previous mode.

Setting up the audio language

- 1. Following the steps 1 to 2 in "Selecting the DVD SETUP menu", touch the [AUDIO LAN-GUAGE] key. Each time you touch the [AU-DIO LANGUAGE] key, you can switch the language list display.
- 2. Touch the key to select a desired language to set it.
 - * The factory default setting is "ENGLISH".
- 3. Touch the [RTN] key to return previous mode.

Setting up the subtitle language

- 1. Following the steps 1 to 2 in "Selecting the DVD SETUP menu", touch the [SUB TITLE LANG.] key. Each time you touch the [SUB TITLE LANG.] key, you can switch the lanquage list display.
- 2. Touch the key to select a desired language to set it.
 - * The factory default setting is "OFF".
- 3. Touch the [RTN] key to return previous mode.

Setting up the password for setting up of the parental level

- 1. Following the steps 1 to 2 in "Selecting the DVD SETUP menu", touch the [PASS-WORD] (password) key.
- 2. Touch the ten-key(0 to 9) to input a 4-digit password.
 - * The factory default setting is "0000".
- 2-1. Input an old password, and touch the [ENT] key.
- 2-2. Input a new password, and touch the [ENT] key.
- 2-3. Input a new password again, and touch the [ENT] kev.
- 3. Touch the [RTN] key to return previous mode.

Note:

When a disc with view limited is played When a disc with view limited is played, the input screen requiring you to input the password may appear. When this happens, enter the correct password, otherwise play does not start.

Setting up the country code

Set up the country number for setting up of the parental level.

- 1. Following the steps 1 to 3 in "Selecting the DVD SETUP menu". touch the [PARENTAL LOCALE] key.
- 2. Touch the ten-key(0 to 9) to input a 4-digit country code.
 - * The factory default setting is "8583"(U.S.A).

■ Country code list

Country	Input code
ALBANIA	6576
ANDORRA	6568
AUSTRIA	6584
BAHRAIN	6672
BELGIUM	6669
BOSNIA AND HERZEGOWINA	6665
BULGARIA	6671
CROATIA (local name: Hrvatska)	7282
CYPRUS	6789
CZECH REPUBLIC	6790
DENMARK	6875
EGYPT	6971
FINLAND	7073
FRANCE	7082
(FRANCE, METROPOLITAN)	7088
GERMANY	6869
GREECE	7182
HUNGARY	7285
ICELAND	7383
IRAN (ISLAMIC REPUBLIC OF)	7382
IRAQ	7381
IRELAND	7369
ISRAEL	7376
ITALY	7384
JAPAN	7480
JORDAN	7479
KUWAIT	7587
LEBANON	7666
LESOTHO	7683
LIECHTENSTEIN	7673
LUXEMBOURG	7685
MACEDONIA.THE FORMER	
YUGOSLAV REPUBLIC OF	7775
MALTA	7784
MONACO	7767
NETHERLANDS	7876
(NETHERLANDS ANTILLES)	6578
NORWAY	7879
OMAN	7977
POLAND	8076
PORTUGAL	8084
QATAR	8165
ROMANIA	8279

DVD Video Player Operations

Country	Input code
SAN MARINO	8377
SAUDI ARABIA	8365
SLOVAKIA (Slovak Republic)	8375
SLOVENIA	8373
SOUTH AFRICA	9065
SPAIN	6983
SWAZILAND	8390
SWEDEN	8369
SWITZERLAND	6772
SYRIAN ARAB REPUBLIC	8389
TURKEY	8482
UNITED ARAB EMIRATES	6569
UNITED KINGDOM	7166
Vatican City State	8665
YEMEN	8969
YUGOSLAVIA	8985
FAROE ISLANDS	7079
GIBRALTAR	7173
GREENLAND	7176
SVALBARD AND JAN MAYEN ISLANDS	8374

- Touch the [ENT] key.
- 4. Touch the [RTN] key to return previous mode.

Setting up the parental level

You can change the level of parental lock (audio-visual restriction).

This function allows cutting scenes that are unfavorable for children or replacing them automatically with other scenes prepared in advance. For example, by replacing scenes of radical violence or portrayals of sex with safe scenes, you can make a trouble-free story as if it were so from the beginning.

- 1. Following the steps 1 to 3 in "Selecting the DVD SETUP menu", touch the [PARENTAL LEVEL] key.
- When you touch the [▲] or [▼] key, PASS-WORD input screen is displayed.
- 3. Touch the ten-key(0 to 9) to input a 4-digit password, and touch the [ENT] key.
 - * The factory default setting of the password is "0000".
- 4. Touch the [▲] or [▼] key to select level 1 to 8, or 0 (no parental).
 - * Smaller numbers indicate a stricter parental level setting.
 - * The factory default setting is "8".

Setting up the output mode for audio sianals

- * This function is not displayed on the menu when the 5.1 ch Surround Decoder (DVH923, sold separately) is CeNET connected.
- 1. Following the steps 1 to 3 in "Selecting the DVD SETUP menu". touch the [AUDIO OUTPUT] key.
- 2. Touch the [ANALOG], [DIGITAL RAW] or [DIGITAL PCM] key to select a desired mode
 - * The factory default setting is "ANALOG".

ANALOG:

Outputs analog audio signals through RCA connection.

DIGITAL RAW:

Outputs 5.1ch digital signals through optical connection. PCM audio signals are output downsampling the signal from 96 kHz to the lower sampling rate, 48 kHz.

DIGITAL PCM:

Outputs 2ch digital signals through optical connection. PCM audio signals are output downsampling the signal from 96 kHz to the lower sampling rate, 48 kHz.

3. Touch the [RTN] key to return previous mode.

Basic Operations

Loading a disc

Insert a disc into the centre of the insertion slot with the label side facing up. The disc plays automatically after loading.

Notes:

- · Never insert foreign objects into the disc insertion
- If the disc is not inserted easily, there may be another disc in the mechanism or the unit may require service.

Loading 8 cm discs

- * No adapter is required to play an 8 cm disc.
- * Insert the 8 cm disc into the centre of the insertion slot.

ACAUTION

With the screen open, a driver may not see the disc insertion slot. For your safety, insert a disc with the screen closed.

Watching/Listening to a disc already inserted

 Press the [FUNC] button to select the DVD mode. Play starts automatically. If no disc is loaded in the unit, "NO DISC" appears in the display.

A WARNING

- Videos may be played back with particularly loud sound. Increase the volume gradually from the minimum after the video images are displayed.
- For your safety, the driver should not watch the video or operate the controls while driving. Please note that watching and operating the video while driving are prohibited by law in some countries.

Notes:

 For your safety, the VRX928RVD has a safety function which turns off the picture when the car is moving, so only the audio can be heard. The picture can only be watched when the car is stopped and the parking break is applied.

Pausing play

- Press the [►/II] button to pause play.
 "PAUSE" appears in the display.
- 2. To resume disc play, press the [▶/II] button again.

Ejecting a disc

- Press the [▲] button a disc ejects. "EJECT " appears in the display.
 - * If a disc (12 cm) is left in the ejected position for 15 seconds, the disc is automatically reloaded. (Auto reload)
 - * 8 cm discs are not auto reloaded. Be sure to remove it when ejected.

Note:

 If you force a disc into before auto reloading, this can damage the disc.

Show the menu screen

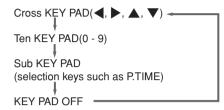
- Touch the screen to show the menu screen while the main screen is being shown.
- * To return to the main screen from the menu screen, touch the [RTN] key.

KEY PAD operation

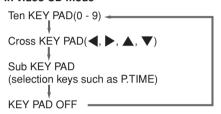
1. Press the [KEY P AD] button.

Each time the button is pressed, the KEY PAD changes as follows.

In DVD video mode



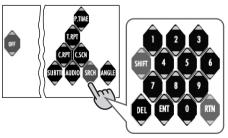
In video CD mode



Notes:

- * The KEY PAD displayed in the DVD video mode always starts from the "Cross KEY PAD" when the mode is engaged.
- * The KEY PAD displayed in the video CD mode always starts from the "Ten KEY PAD" when the mode is engaged.
- * Use either the "Cross KEY PAD" or the "Ten KEY PAD" according to the disc contents menu displayed in DVD video/video CD mode.
- * Only the sub KEY PAD is displayed while you are driving a car.
- * The KEY PAD is not displayed in the menu screen while you are driving a car.

Sub KEY PAD operation



Enter the title number or some other information to select directly

DVD Video Player Operations

- 1. Touch the [SRCH] key to switch the KEY PAD.
- Touch the [0]-[9] key that corresponds to the title number you desired. When you touch the wrong number ([0]-[9] key), you can cancel the key input by touching the [DEL] key.
 - DVD video mode: select the title number.
 - Video CD mode (with the PBC function turned off): select the track number.
 - · CD mode: select the track number.
 - · MP3 mode: select the file (track) number.
- 3. Touch the [ENT] key.

The specified title number is selected and playback starts.

- Function of the other keys
- · In DVD video mode

To turn on/off the play time indication, touch the [P.TIME] key.

To switch the playtime, touch the [**P.TIME**] key for 1 second or longer.

To perform title repeat, touch the [T.RPT] key. To perform chapter repeat, touch the [C.RPT] key. To perform chapter scan, touch the [C.SCN] key. To switch the subtitles, touch the [SUBTTL] key. To switch the language, touch the [AUDIO] key. To switch the angle function, touch the [ANGLE] key.

· In video CD mode:

To turn on/off the play time indication, touch the [P.TIME] key.

To switch the playtime, touch the [**P.TIME**] key for 1 second or longer.

To perform track repeat, touch the [T.RPT] key. To perform track scan, touch the [T.SCN] key. To perform track random, touch the [T-RDM] key. To turn on/off Play Back Control function, touch the [PBC] key.

To switch the language, touch the [AUDIO] key.

In CD mode:

To switch the playtime, touch the [**P.TIME**] key for 1 second or longer.

To perform track repeat, touch the [T.RPT] key. To perform track scan, touch the [T.SCN] key. To perform track random, touch the [T.RDM] key.

• In MP-3 mode:

To switch the playtime, touch the [**P.TIME**] key for 1 second or longer.

To perform folder repeat, touch the [F.RPT] key.

To perform folder scan, touch the [F.SCN] key. To perform folder random, touch the [F.RDM] key. To perform file (track) repeat, touch the [T.RPT] key.

To perform file (track) scan, touch the [T.SCN] key. To perform file (track) random, touch the [T.RDM] key.

 To return to the STANDARD screen, touch the [OFF] key.

DVD Video Operations

Watching a DVD-Video

After disc loading, the play mode is automatically engaged.

Button operation may not be allowed depending on the story of the disc.

● After the menu screen is displayed

For normal DVD-Video discs, the menu screen appears.

After the menu screen is displayed, select an item in the following operations and play it back.

Showing the DVD menu

1. Press the [**MENU**] button during playback. The DVD menus appears.

The displayed contents may differ, depending on the DVD software.

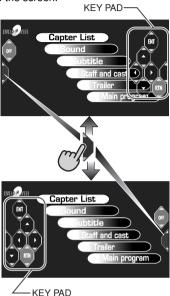
Example showing menu display



- 2. To cancel to the DVD menu, press the [MENU] button again.
 - * To select the menu contents, press the [KEY PAD] button and use either the "Cross KEY PAD" or the "Ten KEY PAD" according to the disc contents menu.

Switching KEY PAD position

When the KEY PAD becomes difficult to view in the menu display, you can move it to the other side of the screen.



Stopping playback

- Press and hold the [►/II] button for 1 second or longer during playback. Playback stops.
- To resume playback. Press the [>/II] button, and playback resumes from the scene where playback is stopped.

Pausing playback

- Press the [►/II] button during playback. Playback pauses.
- To resume playback. Press the [►/II] button, and playback resumes.

Slow playback

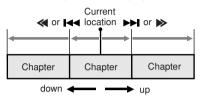
- Press the [>/II] button then press and hold the [>>] button. While the button is being pressed, slow playback continues at the speed 1/2 times the normal playback.
 - Slow playback cannot be performed in the backward direction. In addition, audio cannot be reproduced during slow playback.

Skipping a chapter (searching) About chapter

Chapter means a small segment to divide the data area of the disc.

 Press the [◀] or [▶] button during playback.

Chapters are skipped, as many as the times the button is pressed, and playback starts.



- Press the [>>] button, and playback starts from the beginning of the next chapter.
- Press the [◀] button, and playback starts from the beginning of the current chapter.
 When this button is pressed again within about 2 seconds, playback starts from the beginning of the previous chapter.
- The unit may return to the menu screen when the [▶] button or [◄] button is pressed.

Fast forward and fast backward

 Press and hold the [◀] button or [▶] button during playback.

Press and hold the button, and the playback speed becomes 4-time faster first and then 16-time faster 3 seconds later. Release the button, and the normal speed is restored.

- No audio is reproduced during fast forward and fast rewind operation.
- The fast forward and fast rewind speed may differ depending on the disc.
- The menu screen may appear when the button is pressed.

Searching with a chapter/title number

You can locate the beginning of the scene using the chapter numbers or title numbers recorded on the DVD-Video disc.

Display the sub KEY PAD using the procedures described in the section "KEY P AD operation".

DVD Video Player Operations

2. Touch the [SRCH] key.

Each time you touch the [SHIFT] key, you can switch between title number input "[T**]" and chapter number input "[C***]".

Title

A large segment to divide the data area of the disc.

Chapter

A small segment to divide the data area of the disc.

- 3. Input the number of the title that you want to play back with the [0] to [9] key.
- Touch the [ENT] key.

Playback starts from the scene of the input title number or chapter number.

· If the input title number does not exist or searching with a title number is not allowed, the following message appears to invalidate the input.

○ INVALID

Scan or Repeat play

- 1. Touch the screen, the MENU screen appears.
- Touch the [SUB MODE] key in the MENU screen to show SUB MODE.
- 3. Touch the touch key of the function you want to play.
- [CHAPTER SCAN] (Chapter scan play) Scans and plays back all chapters recorded on the DVD-Video, the first 10 seconds for each.

"CHAPTER SCN" will appear in the screen dur-

● [CHAPTER REPEAT] (Chapter repeat play) Plays back one chapter repeatedly.

"CHAPTER RPT" will appear in the screen during play.

●[TITLE REPEAT] (Title repeat play)

Plays back all chapters within the title repeat. "TITLE RPT" will appear in the screen during play.

- 4. To cancel play, touch the touch key again. To return to the original screen, touch the [RTN] key.
 - · To return the previous screen, touch the [RTN] key.

TOP function

The TOP function resets the DVD player to the first chapter of the track.

1. Press the [BND] button to playback the first chapter(chapter No. 1).

Using the title menu

On DVD discs containing two or more titles, you can select from the title menu for playback.

1. Press and hold the [MENU] button for 1 second or longer during playback.

The title menu screen appears.

- · Press the [MENU] button, and playback resumes from the scene played back before [MENU] button is pressed.
- · Depending on the disc, the title menu cannot be called.
- Touch the [▲], [▼], [◄] or [▶] key to select the item
 - · Depending on the disc, items cannot be selected with the ten-key buttons.
- Touch the [ENT] key.

Switching among languages

On discs in which two or more audios or audio languages have been recorded, you can switch among the audio languages during playback.

- 1. Display the sub KEY PAD using the procedures described in the section "KEY PAD operation".
- 2. Touch the [AUDIO] key during playback. Each time you touch the key, you can switch among audio languages.
 - Depending on the disc, up to 8 audios may be recorded. For details, see the mark of the disc ((8)): Indicates that 8 audios have been recorded).
 - When the power is turned on and when the disc is changed with a new one, the language set at the time of factory shipment is selected. If that language has not been recorded, the language specified on the disc.
 - · Depending on the disc, switching may be completely impossible or impossible on some scenes.
 - It may take time to switch among audios.

Switching subtitles

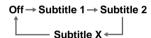
On DVD discs in which two or more subtitle lanquages have been recorded, you can switch among the subtitle languages during playback.

- 1. Display the sub KEY PAD using the procedures described in the section "KEY PAD operation".
- Touch the [SUB TTL] key during playback. Each time you touch rhe key, you can switch among subtitles.
 - · Depending on the disc, up to 32 kinds of subtitles may be recorded. For details, see the mark of the disc (Indicates that 8 kinds of subtitles have been recorded).
 - Depending on the disc, switching may be completely impossible or impossible on some scenes.
 - · It may take time to switch among subtitles.

To turn off subtitles

1. Touch the [SUB TTL] key several times, and subtitles are turned off.

In initial setting:



Switching angles

On DVD discs in which video images have been recorded in two or more angles, you can switch among the angles during playback.

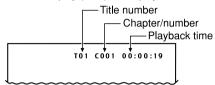
- 1. Display the sub KEY PAD using the procedures described in the section "KEY PAD operation".
- 2. Touch the [ANGLE] key during playback. Each time you touch the key, you can switch among angles.
 - · Depending on the disc, up to 9 angles may be recorded. For details, see the mark of the disc (Ω_1 : Indicates multi-angle).
 - Depending on the disc, angles may switch smoothly or switch with a momentary still image.
 - · When the power is turned on and when the disc is changed with new one, the language set at the time of factory shipment is selected. If that language has not been recorded, the language specified on the disc.
 - Depending on the disc, switching may be completely impossible or impossible on some scenes.

- It may take time to switch among angles.
- Depending on the disc, scenes recorded in two or more angles may be played back.

Displaying the playback status

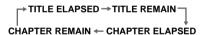
1. Press the [DISP] button or touch the [P.TIME] key in the sub KEY PAD display (using the procedures described in the section "KEY PAD operation") during playback.

Each time you press the button or touch the kev. you can switch between display (ON) and non-display (OFF) of the playback status.



 Depending on the playback status or disc. the following indication may appear.

Each time you touch the key for about 1 second or longer, you can switch among time display.



CHAPTER ELAPSED:

Elapsed time of the chapter

CHAPTER REMAIN:

Remaining time of the chapter TITLE ELAPSED:

Elapsed time of the title

TITLE REMAIN:

Remaining time of the title

Watching a video CD

After disc loading, the play mode is automatically engaged.

 Button operation may not be allowed depending on the story of the disc.

■ After the menu screen is displayed

For V-CD discs equipped with the PBC (Play Back Control) function, the menu screen appears. After the menu screen is displayed, select an item in the following operations and play it back.

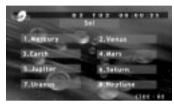
Showing the V-CD menu (for V-CD discs with PBC)

This key does not function on some discs.

Press the [MENU] button during playback.
 The V-CD menu appears.

The displayed contents may differ, depending on the V-CD software.

Example showing menu display



* To select the menu contents, press the [KEY PAD] button and use either the "Cross KEY PAD" or the "Ten KEY PAD" according to the disc contents menu.

Stopping playback

- Press the [►/II] button for 1 second or longer during playback. Playback stops.
- When the PBC is turned on Resume playback

When the Play/pause [▶/II] button is pressed, the disc plays from the beginning.

●When the PBC is turned off

To resume playback, press the [**>/II**] button, and playback resumes from the scene where playback is stopped.

Pausing playback

- Press the [►/II] button during playback. Playback pauses.
- To resume playback, press the [►/II] button, and playback resumes.

Slow playback

 Press the [►/II] button then press and hold the [►] button.

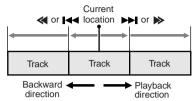
While the button is being pressed, slow playback continues at the speed 1/2 times the normal playback.

 Slow playback cannot be performed in the backward direction. In addition, audio cannot be reproduced during slow playback.

Skipping a track (searching)

 Press the [◀] or [▶] button during playback.

The track is skipped and playback starts.



- Press the [>>] button, and playback starts from the beginning of the next track.
- Press the [
] button, and playback starts from the beginning of the current track.
 When this button is pressed again within about 2 seconds, playback starts from the beginning of the previous track.
- * This operation cannot be performed on some discs with PBC.

Fast forward and fast backward

 Press and hold the [◀] button or [▶] button during playback.

Press and hold the button, and the playback speed becomes 4-time faster first and then 16-time faster 3 seconds later. Release the button, and the normal speed is restored.

- No audio is reproduced during fast forward and fast rewind operation.
- The unit may return to the menu screen when the button is pressed.

Searching with a track number

This operation allows searching with the track numbers recorded on the video CDs.

- Display the sub KEY PAD using the procedures described in the section "KEY PAD operation".
- 2. Touch the [SRCH] key.
- 3. Input the number of the track that you want to play back with [0] to [9] key.
- 4. Touch the [ENT] key.

Playback starts from the scene of the input track number.

 If the input track number does not exist or searching with a track number is not allowed, the following message appears to invalidate the input.

NVALID NVALID

* If you are playing a disc with PBC and the PBC function is engaged, this operation can not be performed.

Changing audio output

You can change the audio output method.

- 1. Display the sub KEY PAD using the procedures described in the section "KEY PAD operation".
- 2. Touch the [AUDIO] key during playback. Each time you touch the key, you can switch among audio output methods.

Other various play functions

- 1. Touch the screen, the MENU screen ap-
- Touch the [SUB MODE] kev in the MENU. screen to show SUB MODE.
- 3. Touch the touch key of the function you want to play.

●[TRACK SCAN]

This operation scans and plays back all tracks on the disc, the first 10 seconds for each.

"TRACK SCN" will appear in the screen during

●[TRACK REPEAT]

This operation plays back one track recorded on the video CD repeatedly.

"TRACK RPT" will appear in the screen during play.

●[TRACK RANDOM]

This operation plays back all tracks on the disc in no particular order.

"TRACK RDM" will appear in the screen during play.

- 4. To cancel play, touch the touch key again.
 - To return to the original screen, touch the [RTN] key.

If you are playing a disc with PBC and the PBC function is engaged, this operation can not be performed.

Displaying the playback status

1. Press the [DISP] button during playback. Each time you press the button, you can

switch between display (ON) and non-display (OFF) of the playback status.

- Depending on the playback status or disc. the following indication may appear.
- 2. Display the sub KEY PAD using the procedures described in the section "KEY PAD operation".
- 3. Touch the [P.TIME] key during playback. Each time you touch the key, you can switch among time display.

TRACK ELAPSED → TRACK REMAIN

Note:

• Depending on some discs, the [P.TIME] indication may not be displayed on some scenes. Also, it may occur that the P.TIME operation does not work. When this happens, the indication "INVALID" will appear.

On/off of Playback Control

* The factory default setting is "ON".

On video CDs equipped with Play Back Control function, you can turn it on/off.

- 1. Display the sub KEY PAD using the procedures described in the section "KEY PAD operation".
- 2. Touch the [PBC] key.

Each time you touch the key, you can switch between on and off.

When the PBC is turned on or off, the disc plays from the beginning.

Playback control (PBC)

This control signal is recorded on a Video CD for version 2.0 and used to control playback. Using pre-recorded menu screens in the Video CD with PBC, you can enjoy playback of software with a simplified dialog function or software with search function. You can also enjoy a still picture at high or standard resolution.

When PBC is on

If one of the following operations is done, the disc plays from the beginning.

When the [FUNC] button is pressed to switch to some other mode, and the DVD player mode is returned again.

When the [▶/Ⅱ] button is pressed to play the disc again after play is stopped by pressing and holding the [/ II] button for 1 second or longer.

When the ACC switch of a car is turned on/off.

Listening to a CD

* This unit is a CD TEXT compatible model. This unit supports the display of the DISC TITLE, TRACK TITLE and ARTIST of the CD TEXT.

After disc loading, the play mode is automatically engaged.

Note:

This unit supports only CD TEXT in English. Also. some character data may not be reproduced properly on the display.

Pausing playback

- Press the [▶/II] button during playback. Playback pauses.
- To resume playback, press the [►/II] button, and playback resumes.

Skipping a track (searching)

1. Press the [◀] or [▶] button during playback.

Tracks are skipped, as many as the times the button is pressed, and playback starts.

- Press the [▶] button, and playback starts from the beginning of the next track.
- Press the [◀] button, and playback starts from the beginning of the current track. When this button is pressed again within about 2 seconds, playback starts from the beginning of the previous track.

TOP function

The TOP function resets the DVD player to the first track of the disc.

1. Press the [BND] button to playback the first track (track No. 1).

Fast forward and fast backward

 Press and hold the [◀] button or [▶] button during playback.

Press and hold the button, and the playback speed becomes 4-time faster first and then 8-time faster 3 seconds later. Release the button, and the normal speed is restored.

Searching with a track number

This operation allows searching using the track numbers recorded on the CDs.

- 1. Press the [KEY PAD] button and toch the [SRCH] key.
- 2. Input the number of the track that you want to play back with [0] to [9] key.
- Touch the [ENT] key.

Playback starts from the scene of the input track number.

· If the input track number does not exist or searching with a track number is not allowed, the following message appears to invalidate the input.



Other various play functions

- 1. Touch the screen, the MENU screen appears.
- Touch the [SUB MODE] kev in the MENU. screen to show SUB MODE.
- 3. Touch the touch key of the function you want to play.
- ●[TRACK SCAN] (Track scan play)

This operation scan and plays back all tracks on the disc, the first 10 seconds for each.

"TRACK SCN" will appear in the screen during

●[TRACK REPEAT] (Track repeat play)

This operation plays back one track recorded on the video CD repeatedly.

"TRACK RPT" will appear in the screen during

●[TRACK RANDOM] (Track random play)

This operation plays back all tracks on the disc in no particular order.

"TRACK RDM" will appear in the screen during

- 4. To cancel play, touch the touch key again.
 - To return to the original screen, touch the [RTN] key.

Changing the display of the playback status

1. Press the [KEY PAD] button and touch the [P.TIME] key during playback.

Each time you touch the key, you can switch among time display.

TRACK ELAPSED → TRACK REMAIN

Displaying CD titles

This unit can display title data for CD-text CDs.

- * This function is enabled only when the panel is open.
- 1. Press the [DISP] button.

Disc title, track title and artist title are displayed. Press the [DISP] button again to return to the previous mode.

Listening to an MP3

This unit is a ID3 Tag compatible model.

This unit supports the title, artist and album display of the ID3 Tag versions 1.0 and 1.1.

After disc selection, the play mode is automatically engaged.

What is MP3?

MP3 is an audio compression method and classified into audio layer 3 of MPEG standards. This audio compression method has penetrated into PC users and become a standard format.

This MP3 features the original audio data compression to about 10 percent of its initial size with a high sound quality. This means that about 10 music CDs can be recorded on a CD-R disc or CD-RW disc to allow a long listening time without having to change CDs.

Note:

 Some CDs recorded in CD-R or CD-RW mode mav not be usable.

Precautions when creating an MP3 disc

File extensions

- 1. Always add a file extension ".MP3" or ".mp3" to an MP3 file by using single byte letters. If you add a file extension other than specified or forget to add the file extension ".MP3" or ".mp3", the file cannot be played. In addition, if you use upper case and lower case letters (capital and small letters) mixedly for file extensions, normal play may not be possible.
- Files without MP3 data will not play.

Logical format (File system)

- 1. When writing an MP3 file on a CD-R disc or CD-RW disc, please select "ISO9660 level 1 or level 2 (without including expansion format)" as the writing software format. Normal playback may not be possible if the disc is recorded on another format.
- 2. The folder name and filename can be displayed as the title during MP3 play but the title must be within 31 and 27 single byte al-

phabetical letters and numerals for the folder name and filename, respectively (without including an extension). Entering more letters or numerals than specified may cause an incorrect display.

Folder structure

1. A disc with a folder having more than 8 hierarchical levels will conflict with the ISO9660 and playback will be impossible.

Number of files or folders

- A total of 255 files and folders are allowed. (However, the maximum number of folders must be within 254.) When the number of files and folders is more than 256, playback of tracks in excess of that number is impossible.
- Tracks are played in the order that they were recorded onto a disc. (Tracks might not always be played in the order displayed on the PC.)
 - Some noise may occur depending on the type of encoder software used while recordina.
 - Files created using LAME (Lame Aint MP3) Encoder) may not be played properly.
 - · In case of a track recorded at VBR (variable bit rate), the display for the play time of the track may be slightly different from the actual play time.
 - Also, the recommended value of VBR ranges from 64 kbps to 320 kbps.
 - Depending on the damage conditions of a file, it may occur that the file is not played and the next file is played instead.

Also, if the damage is in a severe condition, play stops showing the "DISC ER-ROR" display.

After disc selection, the play mode is automatically engaged.

Note:

 If ID3 Tag information was entered with 2-byte characters, it may occur that the characters are not reproduced properly on the display.

Pausing playback

- Press the [▶/II] button during playback. Playback pauses.
- To resume playback, press the [►/II] button again, and playback resumes.

Skipping a track (searching)

 Press the [◀] or [▶] button during playback.

Tracks are skipped, as many as the times the button is pressed, and playback starts.

- Press the [▶] button, and playback starts from the beginning of the next track.
- Press the [
] button, and playback starts from the beginning of the current track.
 When this button is pressed again within about 2 seconds, playback starts from the beginning of the previous track.
- * This operation skips the track over the folder.

Fast forward and fast rewind

 Press and hold the [◀] button or [▶] button during playback.

Press the button, and the playback speed becomes 4-time faster first and then 8-time faster 3 seconds later. Release the button, and the normal speed is restored.

Selecting a file (track) on the screen

- Press the [MENU] button during playback.
 Files (track) are displayed.
- 2. Touch the [▲] or [▼] key to select a file and touch the [ENT] key.
- 3. Touch the [RTN] key to select a folder. The folder selection screen appears.
- Touch the [▲] or [▼] key to select the folder and touch the [ENT] key. The file selection screen is returned.
 - * If no further operation is performed for 7 seconds, the STANDARD screen is returned.

Playback by selecting a folder and file (Direct select mode)

This operation allows searching using the folder and file (track) numbers recorded on the MP3 disc.

1. Press the [**KEY PAD**] button and toch the [**SRCH**] key.

Each time you touch the [SHIFT] key, you can switch between "T000" for file (track) number input and "F000" for folder number input.

- Input the number for the file (track) or folder that you want to play back with [0] to [9] key.
- Touch the [ENT] key.

When you select the folder number playback starts from Track 1 of the input folder number.

Other various play functions

- 1. Touch the screen, the MENU screen appears.
- Touch the [SUB MODE] key in the MENU screen to show SUB MODE.
- Touch the touch key of the function you want to play.
- ●[TRACK SCAN] (File scan play)

This operation plays back all files recorded on the disc, about 10 seconds for each.

"TRACK SCN" will appear in the screen during play.

● [FOLDER SCAN] (Folder scan play)

This operation plays back in the first titles of all folders on the MP3 disc, about 10 seconds for each.

"FOLDER SCN" will appear in the screen during play.

●[TRACK REPEAT] (File repeat play)

This operation plays back the file currently being played back repeatedly.

"TRACK RPT" will appear in the screen during play.

●[FOLDER REPEAT] (Folder repeat play)

This operation plays back files in an PM3 folder repeatedly.

"FOLDER RPT" will appear in the screen during play.

●[TRACK RANDOM] (File random play)

This operation plays the files in the folder in a random order.

"TRACK RDM" will appear in the screen during play.

●[FOLDER RANDOM] (Folder random play)

This operation plays back tracks recorded on the disc in no particular order.

"FOLDER RDM" will appear in the screen during play

- 4. To cancel play, touch the touch key again.
 - To return to the original screen, touch the [RTN] key.

Changing the display of the playback status

1. Press the [KEY PAD] button and touch the [P.TIME] key during playback.

Each time you touch the key, you can switch among time display.

TOP function

The TOP function resets the DVD player to the first track of the disc.

1. Press the [BND] button to playback the first track(track No. 1).

Displaying MP3 ID3-TAG titles

ID3 information such as title, artist and album title can be displayed for an MP-3 file containing ID3 Tag information.

- * This function is enabled only when the panel is open.
- 1. Press the [DISP] button.

Title, artist and album title are displayed. Press the [DISP] button again to return to the previous mode.

* In case of an MP3 file without ID3-TAG data. "NO ID3 TAG DATA" appears in the display then return to the STANDARD screen.

VISUAL Operations

This function is available when a VTR, etc. is connected to the visual 1 or visual 2 terminal.

▲ WARNING

For your safety, the driver should not watch the VTR, etc. or operate the controls while driving. Please note that watching and operating the VTR, etc. while driving are prohibited by law in some countries.

Switching to the VISUAL mode Notes:

- For your safety, the VRX928RVD has a safety function which turns off the picture when the car is moving, so only the audio can be heard. The picture can only be watched when the car is stopped and the parking break is applied.
- 1. Press the [FUNC] buton and select the VI-SUAL mode.
- Press the [BND] button to select the VI-SUAL1 or VISUAL2.

Switching the VTR system between NTSC and PAL

* This function is enabled only when the panel is

Switch to the VISUAL/VTR in TV mode you use.

- 1. Press the [ADJ] button to switch to the AD-JUST MODE menu.
- 2. Touch the [NTSC/PAL] key, [NTSC] key and [PAL] key appears in the display.
- Touch the [NTSC] key or [PAL] key to select "NTSC" or "PAL".

Adjusting the brightness and tone of color

Notes:

- This function is not available when the display is stored.
- The HUE setting can be adjusted only when the NTSC mode is selected in the VISUAL mode.
- Switch to the VISUAL/DVD player(DVD video or video CD)/DVD changer/TV mode you see.
- 1. Press the [ADJ] button to switch to the AD-JUST MODE menu.
- 2. Touch the [MONI ADJ] key to display [BRIGHT], [HUE] and [COLOR] key. Touch the [BRIGHT], [HUE] and [COLOR] key to adjust BRIGHT, HUE and COLOR.
 - "BRIGHT":

Adjust the brightness of the display.

● "HUE":

Adjust the tone of color (red is emphasized or green is emphasized)

• This operation is available only when the car is stopped and the parking brake is applied.

• "COLOR":

Adjust the color saturation.

- This operation is available only when the car is stopped and the parking brake is applied.
- Operate the touch key to adjust a level.
 - "BRIGHT":
 - [-] key or [+] key
 - "HUE":

[R] key or [G] key

- "COLOR":
- [-] key or [+] key
- When adjustment is made, touch the [RTN] key to return to the ADJUST MODE menu.
 Touch the [RTN] key again to return to the STANDARD screen.
 - * To return from the adjust a level display to the STANDARD screen, press the [ADJ] button once again.

Changing over monitor display size

* This function is available only when the panel is open.

Note

- This function is not available while you are driving.
- Switch to the VISUAL/DVD player(DVD video or video CD)/DVD changer/TV mode you see.
- Press the [DISP] button for 1 second or longer to change over the monitor display size. Each time you press the [DISP] button, the monitor display size changes in the following order:
 - "F. WIDE" → "CINEMA" → "NORMAL" → "WIDE" → "F. WIDE"
 - "NORMAL": (normal display)

There is a black area at both right and left ends of a display. In case of normal TV broadcasting (4:3), the image can be shown without being cut or deformed.

• "WIDE": (wide mode)

The image at right and left ends in a display elongates horizontally.

• "F. WIDE": (full wide mode)

The whole image elongates horizontally.

"CINEMA": (cinema mode)

The image at both top and bottom in a display disappears.

Notes:

- When a normal 4:3 size image, not being a wide one, is viewed by displaying it fully on a wide monitor display in a wide mode or a full-wide mode, a part of the peripheral image will be lacking or deformed. In deference to the intention of producer, an original image can be viewed in a normal mode.
- During superimposed display, it becomes a fullwide mode.
- When the monitor display size mode is changed, only the monitor display size indication superimposed on the screen ("NORMAL", "WIDE", "F.WIDE" or "CINEMA") will be changed, then the corresponding display size mode will be engaged.

Monitoring the CCD camera

The CCD camera can be connected to this unit. For the power supply of the camera, mount the power box sold separately (CAA-188).

Notes.

 This function is not available when the display is stored.

Switching the 2-ZONE/3-ZONE

The front monitor lock and rear monitor lock allows you to enjoy 2-ZONE and 3-ZONE.

2-ZONE:

Use the front monitor lock (or rear monitor lock) to lock the receiver screen image (or image from a separately sold rear monitor) to switch the speaker sound to a sound mode that differs from the sound accompanying the image.

3-ZONE

When a separately sold rear monitor is connected, use the front or rear monitor lock to lock the image of the receiver and that of the rear monitor and to switch the speaker sound to a sound mode that differs from the sound accompanying the image.

Notes:

- The front monitor lock displays the image of an external device (VTR, TV game console, etc.) connected to the Visual 2 or NAVI terminal.
- The rear monitor lock displays the image of an external device (VTR, TV game console, etc.) connected to the Visual 1 terminal.
- When 2-ZONE or 3-ZONE is used, the sound from an external device (VTR, TV game console, etc.) can only be heard from headphones connected to the external device.
- · A rear monitor is a separately sold accessory.

Lock system monitor image and sound

	2 ZONE				
	Front monitor lock		Rear monitor	3 ZONE	
(*1)	Visual 2 connection [OTHERS]	NAVI connection [CLARION], [RGB], [COMPOSITE]	lock	0 ZONZ	
Front image (receiver screen)	Image of device connected to the Visual 2 terminal (*3)	Image of device connected to the NAVI or RGB terminal	Displays image of mode selected using the [FUNC] button	Image of device connected to the Visual 2 terminal (*3) or NAVI/RGB terminal.	
Rear monitor image (separately sold)	Image of device connected to the Visual 2 terminal (*3)	Displays image of mode selected using the [FUNC] button (*2)	Image of device connected to the Visual 1 terminal		
Vehicle speaker sound	Plays sound of mode selected using the [FUNC] button				

- *1 A device connected to the Visual 2 or NAVI/RGBterminal should be set up as described in the section "Switching Connect."
- *2 No image is displayed on the rear monitor when a non-image mode such as radio, DAB, CD, etc. is engaged.
- *3 For safety reasons, this image is not displayed when the vehicle is moving. The picture can be watched only when the vehicle is standing still and the parking brake is engaged.
- *4 When you connect a clarion Navigation to the unit, connect the cables provided with the navigation unit to the NAVI terminal and the RGB terminal at the same.

2-ZONE: 1 (front monitor lock)

- 1. Press the [N/A] button.
- 2. Press the [FUNC] button to select the desired mode.
- To cancel the monitor lock, press the [N/A] button. The screen shows the image of the selected mode.
 - * When the front monitor lock is engaged, [MENU], [LIST], [KEY PAD], [ADJ] and [A-M] button cannot be used. Cancel the monitor lock when you wish to use these buttons. (Except when a clarion navigation unit is connected to the unit)

2-ZONE: 2 (rear monitor lock)

- 1. Press the [ADJ] button to display the AD-JUST MODE menu.
- 2. Touch the [REAR MONI LOCK] key and the [ON] key.
- 3. Touch the [RTN] key or press the [ADJ] button.
- 4. To cancel the monitor lock, press [ADJ] button, touch the [REAR MONI LOCK] key and the [OFF] key.

Touch the [RTN] key or press the [ADJ] button. The monitor lock is now canceled.

Locking the front monitor and rear monitor (3-ZONE)

- 1. Lock the rear monitor by performing the instructions in steps 1 to 3 above.
- Press the [N/A] button to lock the front monitor.
- Press the [FUNC] button.
 - The image for the selected mode is displayed for about 5 seconds after which the front monitor lock image is displayed.
- 4. To cancel the monitor lock, press the [N/A] button.
- 5. To cancel the rear monitor lock, press the [ADJ] button, touch the [REAR MONI LOCK] key and the [OFF] key.

VISUAL Operations

Switching CONNECT(connect)

Make the following settings when an external device is connected to the VISUAL 2 or NAVI. RGB terminal.

CLARION: When Clarion navigation system

is connected to the NAVI and

RGB terminal.

RGB: When a RGB image of other

company's equipment is connected to the RGB terminal.

COMPOSITE: When a composite image of

other company's equipment is connected to the NAVI terminal.

OTHERS: When an external device other

than a navigation system is connected to the VISUAL 2 terminal.

- * The factory default setting is "CLARION".
- 1. When the panel is open, press the [ADJ] button to display the ADJUST MODE menu.
- 2. Touch the [▼] key to select "CONNECT". Touch the [CONNECT] key to select "CLARION" or "RGB" or "COMPOSITE" or "OTHERS"
- 3. Press the [ADJ] button again or touch the [RTN] key, the unit returns to the previous mode.

CD/MD Changer **Operations**

Note:

 When an optional DVD (CD/MD) changer is connected through the CeNET cable, this unit controls all DVD (CD/MD) changer functions. This unit can control a total of 2 changers (MD and/or CD and/or DVD).

CD/MD changer functions

Press the [FUNC] button and select the CD changer mode to start play. If 2 CD (MD) changers are connected, press the [FUNC] button to select the CD (MD) changer for play.

- * If "NO MAGAZINE" appears in the display, insert the magazine into the CD changer, "DISC CHECKING" appears in the display while the player loads (checks) the magazine.
- * If "NO DISC" appears in the display, eject the magazine and insert discs into each slot. Then, reinsert the magazine back into the CD changer.
- * If "NO DISC" appears in the display, load MDs into the MD changer.

ACAUTION

CD-ROM discs cannot be played in the CD changer.

Pausing play

- Press the [] button to pause play. "PAUSE" appears in the display.
- To resume play, press the [►/II] button
 - * When the panel is open, the same operation is also available by using the [>/II] button in the panel.

Switching the CD TEXT titles

This operation is only possible when this unit is connected with a CD TEXT compatible CD changer.

You can select the CD TEXT titles among the disc titles, track titles and artist titles.

When the panel is closed:

- 1. Press the [DISP] button to show the SUB display. The disc title, track title or artist titles, user title is displayed.
- 2. Each time you press and hold the [DISP] button for 1 second or longer, the display toggles among the disc title, the track title or the artist titles, user title.

The selected title scrolls once.

CD/MD Changer Operations

When the panel is open:

- 1. Press the [DISP] button.
 - The disc title, track title, artist title and user title is displayed.
- 2. Touch the [DISC] key, [TRACK] key, [ARTIST] key or [USER] key to select the desired title. The selected titles except for the user title scroll once.
- 3. Press the [DISP] button again.

The STANDARD screen is returned and the selected title is displayed.

Switching disc titles and track titles (MD)

This unit can display disc titles and track titles already entered on MDs. Titles up to 256 characters long can be displayed by scrolling the titles.

* Titles cannot be entered for MDs with this unit.

When the panel is closed:

- 1. Press the [DISP] button to show the SUB display. The disc title or track title is displayed.
- 2. Each time you press and hold the [DISP] button for 1 second or longer, the display toggles between the disc title and the track title.

The selected title scrolls once.

When the panel is open:

- 1. Press the [DISP] button.
 - The disc title and track title are displayed.
- 2. Touch the [DISC] key or [TRACK] key to select the desired title.

The selected titles scroll once.

3. Press the [DISP] button again.

The STANDARD screen is returned and the selected title is displayed.

Selecting an MD

When the panel is closed:

Each of the [DIRECT] button corresponds to an MD loaded into the MD changer.

Press the [DIRECT] button (1 to 6) and select the desired MD.

When the panel is open:

1. Touch the screen or press the [LIST] button.

2. Each of the [DIRECT] key corresponds to an MD loaded into the MD changer.

Touch the [DISC SELECT] key in the display. the [DIRECT] key (1 to 6) appears in the dis-

Touch the [DIRECT] key (1 to 6) and select the desired MD.

Selecting a CD

When the panel is closed:

Each of the [DIRECT] buttons corresponds to a disc loaded into the magazine.

Selecting a disc from 1 to 6

Press the corresponding [DIRECT] button (1 to to select the desired disc.

 Selecting a disc from 7 to 12 (only when a 12 disc CD changer is used.)

Press the corresponding [DIRECT] button (1 to 6) for 1 second or more, then select the desired disc.

When the panel is open:

Each of the [DIRECT] keys corresponds to a disc loaded into the magazine.

- Selecting a disc from 1 to 6
- 1. Touch the screen or press the [LIST] button.
- 2. Touch the [DISC SELECT] key in the display, the [DIRECT] key (1 to 6) appears in the display.

Touch the corresponding [DIRECT] key (1 to 6) to select the desired disc.

Selecting a disc from 7 to 12 (Only when a 12 disc CD changer is used.)

Touch the [DISC SELECT] key again, the [DI-**RECT**] key (7 to 12) appears in the display.

Touch the corresponding [DIRECT] key (7 to 12) to select the desired disc.

Switching to a next disc. (Disc Up function)

The disc up function plays from the first track (track No.1) of the next disc.

Press the [BND] button.

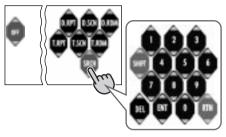
Each time you press the [BND] button, the disc changes to the next disc.

CD/MD Changer Operations

Selecting tracks with the KEY PAD

* This function displays the KEY PAD on the screen and allows you to select and repeat tracks you wish to listen to.

Press the [KEY PAD] button to display the KEY PAD.



Direct track selection

- 1. Touch the [SRCH] key to switch the KEY PAD.
- 2. Touch the [0] ~ [9] key corresponding with the track you desired. When you touch the wrong number([0] ~ [9] key), you can cancel that to touch the [DEL] kev.
- 3. Touch the [ENT] key. The specified track is selected and playback starts.
- To repeat tracks,

touch the [T.RPT] key.

To repeat discs,

touch the [D.RPT] key.

To scan tracks,

touch the [T.SCN] kev.

To scan discs,

touch the [D.SCN] key.

To play tracks at random,

touch the [T.RDM] key.

To play discs at random.

touch the [D.RDM] key.

Selecting a track

Track-up

- Press the [▶] button to move ahead to the beginning of the next track.
- Each time you press the [▶] button, the track advances ahead to the beginning of the next track.
 - * When the panel is open, the same operation is also available by using the [>>] button in the panel.

Track-down

- Press the [◀] button to move back to the beginning of the current track.
- Press the [◀] button twice to move to the beginning of the previous track.
 - * When the panel is open, the same operation is also available by using the [] button in the panel.

Fast-forward/Fast-backward

Fast-forward

Press and hold the [>] button for 1 second or

* When the panel is open, the same operation is also available by using the [>>] button in the panel.

Fast-backward

Press and hold the [◀] button for 1 second or longer.

* When the panel is open, the same operation is also available by using the [◀] button in the panel.

Top function (CD)

The top function plays from the first track (track No. 1) of the disc.

When playing a disc 1 to 6

Press the [DIRECT] button (1 to 6) with the same number as the CD playing.

• When playing a disc 7 to 12 (only when a 12 disc CD changer is used.)

Press the [DIRECT] button (1 to 6) with the same number as the CD playing for 1 second or longer.

Top function (MD)

The top function plays from the first track (track No. 1) of the disc.

Press the [DIRECT] button (1 to 6) with the same number that the MD playing.

* If an MD is not loaded in a slot of the MD changer, pressing the [DIRECT] button corresponding to its disc number is invalid.

CD/MD Changer Operations

Other various play functions

- 1. Touch the screen, the MENU screen appears.
- Touch the [SUB MODE] key in the MENU. screen to show SUB MODE.
- 3. Touch the touch key of the function you want to play.
- ●[TRACK SCAN] (Track scan play)

The scan play locates and plays the first 10 seconds of each track on a disc automatically.

"TRACK SCN" will appear in the screen during play.

●[DISC SCAN] (Disc scan play)

The disc scan play locates and plays the first 10 seconds of the first track on each disc in the currently selected CD (MD) changer.

"DISC SCN" will appear in the screen during play.

●[TRACK REPEAT] (Track repeat play)

The repeat play continuously plays the current track.

"TRACK RPT" will appear in the screen during play.

●[DISC REPEAT] (Disc repeat play)

After all tracks in the current disc have been played, the disc repeat play automatically replays the current disc over from the first track.

"DISC RPT" will appear in the screen during play.

●[TRACK RANDOM] (Track random play)

The random play selects and plays individual tracks on the disc in no particular order.

"TRACK RDM" will appear in the screen during play.

●[DISC RANDOM] (Disc random play)

The disc random plays individual tracks or discs automatically in no particular order.

"DISC RDM" will appear in the screen during play.

- 4. To cancel play, touch the touch key again.
 - · To return to the original screen, touch the [RTN] key.

DVD Changer Operations

This function allows you to control a connected DVD changer in the same way as described in DVD player Operation.

For details on operations other than those described below, see DVD player Operation. For details on DVD changer precautions, refer to the supplied owner's manual.

Selectina a disc

When the panel is closed:

Each of the [DIRECT] button corresponds to a disc loaded into the DVD changer.

Press the [DIRECT] button (1 to 6) and select the desired disc.

When the panel is open:

Press the [LIST] button, otherwise press the [DISC SEL] button on the remote control unit.

Touch the [DIRECT] key (1 to 6) in the display or press the numeric button for the disc number (1) to 6) on the remote control unit to select the desired disc.

Switching to a next disc. (Disc Up function)

The disc up function plays from the first track (track No.1) of the next disc.

Press the [BND] button.

Each time you press the [BAND] button, the disc changes to the next disc.

Disc Repeat playback

This operation plays back all tracks on the disc repeatedly. (In case of only music CDs.)

There are 3 ways available:

- Press the [KEY PAD] button and touch the [D.RPT] key.
- Touch the screen and touch the [SUB MODE] key. Touch the [DISC REPEAT] key then touch the [RTN] key.
- Press the [RPT] button on the remote control unit 1 second or longer.
- * To cancel the disc repeat play, touch the [D.RPT]/ [DISC REPEAT] key or press the [RPT] button on the remote control unit.

TV Operations

TV functions

When an optional TV tuner is connected through the CeNET cable, this unit controls all TV tuner functions. To watch TV requires a TV tuner.

WARNING

For your safety, the driver should not watch the TV or operate the controls while driving. Please note that watching and operating the TV while driving are prohibited by law in some countries.

Watching TV

Notes:

- For your safety, the VRX928RVD has a safety function which turns off the picture when the car is moving, so only the audio can be heard. The picture can only be watched when the car is stopped and the parking break is applied.
- After setting a country to be received, tune in to a station. For setting the country, see the subsection "Setting the TV area".
- 1. Press the [FUNC] button and select the TV mode.
- Press the [BND] button to select the desired TV band (TV1 or TV2). Each time the button is pressed, the input selection toggles between TV1 and TV2.
- Press the [▶] or [◄] button to tune in the desired TV station.
 - * When the panel is open, the same operation is also available by using the [◀] and [▶] button in the panel.

Watching a video

The TV tuner has a VTR input terminal to which 1 external device can be connected. Connect a 12V video cassette player (VCP) or video cassette recorder (VCR) to the TV tuner input terminal.

- 1. Touch the screen or press the [LIST] button, the MENU screen appears.
- 2. Touch the [EXTRA SELECT] key in the MENU screen to select the [VTR] key.
- 3. To return to the TV broadcast, touch the screen again and touch the [EXTRA SELECT] key in the MENU screen to select the [TELEVISION] kev.

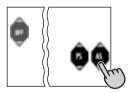
Seek tuning

- 1. Press the [BND] button and select the desired TV band (TV1 or TV2).
 - * If "MANU" is lit in the display, press and hold the [BND] button for 1 second or longer. "MANU" in the display goes off and seek tuning is now available.
- Press the [▶] or [◄] button to automatically seek a station. Press the [▶] button to automatically tune up the frequency band to the next available TV station: press the [◀] button to automatically tune down.
 - * When the panel is open, the same operation is also available by using the [◀] or [▶] button in the panel.

Selecting stations with the KEY PAD

* This function displays the KEY PAD on the screen enabling you to tune in through auto store, preset

Press the [KEY PAD] button to display the KEY PAD.



To use auto store,

touch the [AS] key for about 2 seconds.

- To perform a preset scan, touch the [PS] key.
- To cancel the KEY PAD display. press the [KEY PAD] button or touch the [OFF] key.

Manual tuning

There are 2 ways available: Quick tuning and step tuning. When you are in the step tuning mode, the frequency changes one step at a time. In quick tuning mode, you can quickly tune the desired frequency.

- 1. Press the [BND] button and select the desired band. (TV1 or TV2)
 - * If "MANU" is not lit in the display, press and hold the [BND] button for 1 second or longer. "MANU" appears in the display and manual tuning is now available.

Tune into a station.

Quick tuning:

Press and hold the [▶] or [◄] button for 1 second or longer to tune in a station.

Step tuning:

Press the [▶] or [◀ button to manually tune in a station.

Noto.

 Manual tuning is cancelled if you do not operate the unit for 7 seconds longer.

Recalling a preset station

A total of 12 TV stations can be stored (6-TV1 and 6-TV2). This allows you to select your favorite TV stations and store them in memory for later recall.

There are 2 ways available to recall the preset station.

•Using the [DIRECT] buton.

- 1. Press the [BND] button and select the desired TV band. (TV1 or TV2)
- To recall a stored TV station, press the desired [DIRECT] button to select that station.
 - * Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current station into the preset memory.

Using the [DIRECT] key.

- 1. Press the [LIST] button or touch the screen when the STANDARD screen is displayed, then touch the [P.CH SELECT] key.
- 2. Touch the corresponding [DIRECT] key to recall the stored station.
 - * You can select the desired band to touch the [BAND] key.
- 3. Touch the [RTN] key or press the [LIST] button to return to the previous mode.

Manual memory

- 1. Select the desired station with seek tuning, manual tuning or preset tuning.
- 2. Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current station to that preset memory.

Auto store

Auto store selects 6 TV stations automatically and stores each one into a preset memory.

If there are not 6 stations with good reception. stations previously stored in memory remain and only the strong stations are stored into memory.

- 1. Press the [BND] button and select the desired TV band. (TV1 or TV2)
- 2. Touch the screen or press the [LIST] button. the MENU screen appears.
- 3. Touch the [SUB MODE] key in the MENU screen, the [AUTO STORE] key appears in the display.
- 4. Touch and hold the [AUTO STORE] key for 2 seconds or longer. The stations with good reception are stored automatically to the preset channels.

Preset scan

Preset scan allows the user to view each preset position before it automatically advances to the next preset. This function is useful for searching for desired TV station in memory.

- 1. Touch the screen or press the [LIST] button, the MENU screen appears.
- 2. Touch the [SUB MODE] key in the MENU screen, the [PRESET SCAN] key appears in the display.
- 3. Touch the [PRESET SCAN] key to start preset scan. The unit starts scanning each station for 7 seconds sequentially.
- 4. When the desired channel is received, touch the [PRESET SCAN] key again.

Setting the TV diver

- * This function is enabled only when the panel is
- * Normally use the TV diver with the "ON" position. You can change the reception setting for the TV antenna connected to the TV tuner.
- 1. Press the [ADJ] button to switch to the ADJUST MODE menu.
- 2. Touch the [TV] key to select "TV DIVER". Touch the [TV DIVER] key to display [ON]/ [OFF] key.
- 3. Touch the [ON] key or [OFF] key to set the selected reception setting.
 - ON:

Sets reception emphasizing the visual.

OFF:

Sets the diver setting to OFF.

4. Press the [ADJ] button or touch the [RTN] key to return to the previous mode.

TV Operations

Setting the TV area

* This function is enabled only when the panel is open.

When you select the TV area (TV reception area), the TV tuner area setting changes.

- 1. Press the [ADJ] button to switch to the ADJUST MODE menu.
- Touch the [TV] key to select "TV AREA". Touch the [TV AREA] key to display a list of country name.
- Touch the "COUNTRY NAME" key to select a desired country.
- 4. When the setting is finished, touch the [RTN] key in the TV AREA selection display to return to the previous mode.
 - * To return from the TV AREA select display to the STANDARD display, press the [ADJ] button once again.

Digital Radio/DAB Operations

About DAB programmes

The Digital Audio Broadcasting (hereinafter referred to as "DAB") system transmits several programmes on one frequency simultaneously, by compressing audio signals.

- The group of programmes, which is transmitted on a single frequency is called "ensemble".
- Some DAB stations have several ensembles and broadcast diversified programmes.
- The number of programmes and the contents which an ensemble provides depend on the broadcast stations and times. Since DAB programmes are broadcast on several different frequencies, the same programme can be enjoyed over large areas.
- A DAB station has multiple programmes on one frequency.
- When you turn the unit on and select DAB mode, the programme that starts is the one that was selected before when the power was turned off. If this programme is not available, another programme is selected automatically.
- Programmes have their own names, just like PS on RDS.

Note:

 For sophisticated audio quality, the receiver needs to tune on a DAB Ensemble. While the receiver is being tuned in to the DAB Ensemble. the Audio outputs are muted. The tuning time is not fixed.

Listening to the DAB

- 1. Press the [FUNC] button and select the DAB mode.
- Press and hold the [◀] or [▶] button for 1. second or longer to tune in a station.

Seek tuning

- 1. Press the [FUNC] button to select DAB mode.
- Press and hold the [◀] or [▶] button for 1 second or longer.
 - * The unit stops the seek tuning when it cannot find a DAB station. The display returns to the previous mode.

Selecting stations with the KEY PAD

* This function displays the KEY PAD on the screen enabling you to tune in through service scan.

Press the [KEY PAD] button to display the KEY PAD.



To perform a service scan,

touch the [S.SCN] key.

To cancel the KEY PAD display,

press the [KEY PAD] button or touch the [OFF] key.

Manual tuning

- 1. Press the [FUNC] button to select DAB mode.
- Press and hold the [BND] button for 1 second or longer.
- Press the [◀] or [▶] button to select a station.

Note:

· Manual tuning is cancelled if you do not operate the unit for 7 seconds or longer.

Recalling a preset station

This unit has another preset memory function for DAB stations. Up to 18 stations (6 for each [MEM1], [MEM2] and [MEM3]) can be preset in the [DIRECT] buttons.

- 1. Press the [FUNC] button to select DAB mode.
- 2. Press the [BND] button to select anyone of [MEM1], [MEM2] and [MEM3]. Each time you press the [BND] button, the display changes in the following order:

 $[MEM1] \rightarrow [MEM2] \rightarrow [MEM3] \rightarrow [MEM1]...$

3. Press the corresponding the [DIRECT] button to recall the stored station.

Note:

• Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store that station into preset memory.

Manual memory

- 1. Press the [FUNC] button to select DAB
- Press the [BND] button to select anyone of [MEM1], [MEM2] and [MEM3].
- Select the desired station using seek tuning. manual tuning or preset tuning.
- Press and hold one of the [DIRECT] buttons for 2 seconds or longer to store the current station into preset memory.

Switching programmes

- 1. Press the [FUNC] button to receive a DAB station.
- Press the [◀] or [▶] button to switch programmes in the DAB station.

Note:

 Programmes may not be switched depending on DAB station or broadcasting time.

Service scan

This function scans through each receivable programme in a DAB station being received for 10 seconds sequentially. This is useful when you want to search for a desired programme.

- 1. Press the [FUNC] button to receive a DAB station.
- 2. Press the [SUB MODE] key in the MENU screen and press the [SERVICE SCAN] key. The unit starts scanning each programme for 10 seconds sequentially.
- 3. When a programme which you want to listen is turned in, press the [DIRECT] button.

AF function

The AF function switches to a different frequency on the same network in order to maintain optimum reception.

- * The factory default setting is "ON".
- Switching OFF the AF function

Touch the [DAB MODE] key in the MENU screen, the [AF] key appears in the display. Touch the [AF] key and "AF ON" switches to "AF OFF". The "AF" indication goes off.

Switching ON the AF function

Touch the [DAB MODE] key in the MENU screen, the [AF] key appears in the display. Touch the [AF] key and "AF OFF" switches to "AF ON". The "AF" indication lights.

Digital Radio/DAB Operations

- * If the reception of the current broadcast station deteriorates, "SEARCH" lights in the display and the radio searches for the same programme on another frequency.
- * When AF is ON, if the reception of an RDS broadcast deteriorates, the AF indication flickers.

AF function between RDS and DAB

When the same programme is broadcast by both RDS and DAB, and this function is ON, the unit switches automatically to the broadcast with the better reception.

- * This function only operates when the DAH913 DAB unit, sold separately, is connected.
- 1. Press the [ADJ] button to show the adjustment selection display.
- Touch [DAB] key to select "LINK ACT".
- 3. Touch the [LINK ACT] key and the [LINK ACT ON/OFF] key appears.

Touch the [ON] or [OFF] key to select "ON" or "OFF".

ON:

AF switching between DAB and RDS enabled.

OFF:

AF switching between DAB and RDS disabled.

4. Press the [ADJ] button to return to the previous mode.

TA (Traffic Announcement)

In TA standby mode, when a traffic announcement broadcast starts, the traffic announcement broadcast is received as top priority regardless of the function mode so you can listen to it. Traffic programme (TP) automatic tuning is also possible.

- * RDS interrupt does not function during AM radio reception or in TV mode.
- * This function can only be used when "TP" is lit in the display. When "TP" is lit, this means that the RDS broadcast station being received has traffic announcement programmes.

Setting TA standby mode

If you press the [TA] button when only "TP" is lit in the display, "TP" and "TA" light in the display and the unit is set into TA standby mode until a traffic announcement is broadcast. When a traffic announcement broadcast starts, "TRA **INFO**" appears in the display. If you press the [TA] button while a traffic announcement broadcast is being received, the traffic announcement broadcast reception is cancelled and the unit goes into TA standby mode.

Cancelling TA standby mode

With "TP" and "TA" lit in the display, press the [TA] button. The "TA" indicator in the display goes off and TA standby mode is cancelled.

* If "TP" is not lit, pressing the [TA] button searches for a TP station.

Searching for a TP station

When "TP" is not lit, if you press the [TA] button. the "TA" in the display lights and the unit automatically searches a TP station.

• The same operation can be performed by the touch key on the screen instead of the [TA] button.

Touch the screen switching touchkey when the STANDARD screen is showing or press the [LIST] button. the MENU screen appears.

Touch the [DAB MODE] key in the MENU screen and the [TA] key appears in the display.

Information standby mode

When the INFORMATION programme selected in the "INFO SEL" display of the adjustment mode starts, the unit switches to the selected INFORMATION programme automatically.

- * For details on "Information select", refer to the section "Information select".
- 1. Press the [TA] button, for 1 second or longer, "INFO" lights in the display and the unit is set to Information standby mode until information
 - * If you press the [TA] button while the INFORMATION programme is being broadcast, the programme broadcast is cancelled and the unit enters Information standby mode.
- 2. To cancel Information standby mode, press the [TA] button again for 1 second or longer.

Note:

- Only in case of DAB connection, this can be operated even in the RDS tuner mode.
- · The same operation can be performed by the touch key on the screen instead of the [TA] button.

Touch the screen switching touchkey when the STANDARD screen is showing or press the [LIST] button, the MENU screen appears.

Touch the [DAB MODE] key in the MENU screen and the [TA] key appears in the display.

Information select

This function allows selecting a type of INFOR-MATION on INFORMATION interrupt mode. You can set any of the 6 types of INFO below:

TRAVEL, WARNING, NEWS, WEATHER, EVENT. SPECIAL

- * This function is enabled only when the panel is open.
- Touch the screen switching touchkey when the STANDARD screen is showing and the STANDARD screen appears.

Press the [ADJ] button in the STANDARD screen and touch the [DAB] key, the [INFO SELECT] key appears in the display.

- Touch the [INFO SELECT] key to select a desired INFORMATION.
- Touch the [ON] or [OFF] key to select ON or OFF and to set it.
- When the setting is finished, touch the [RTN] key to return to the STANDARD display.

PTY

This function enables you to listen to the selected programmes type, irrespective of the function mode.

- * RDS interrupt does not function during AM radio reception or in TV mode.
- * DAB and RDS have the same PTY.
- * You can select one PTY from DAB or RDS.
- PTY broadcast are not yet available in all countries.
- * In INFO standby mode, INFO stations have priority over PTY stations.
- * In TA standby mode, TP stations have priority over PTY broadcasting station.

Selecting PTY

- Touch the [PTY SELECT] key in the MENU screen, the [PRESET] key is appeared.
 When you touch the [PRESET] key, the unit goes into PTY select mode.
- Press any one of the [DIRECT] buttons to select the desired PTY.
 - * Below are the factory default settings stored for [DIRECT] buttons.

Preset	PTY item		
number	ENGLISH	Contents	
1	News	News	
2	Info	Information	
3	Pop M	Pop music	
4	Sport	Sport	
5	Classics	Classics	
6	Easy M	Easy listening music	

The PTY select mode is cancelled automatically 7 seconds after a PTY is selected.

● Cancelling PTY standby mode

Touch the [**DAB MODE**] key in the MENU screen, the [**PTY**] key is appeared.

Touch the [PTY] key and "PTY ON" switches to "PTY OFF" and the PTY standby mode is cancelled.

PTY seek

- Touch the [PTY SELECT] key in the MENU screen and touch the [ITEM SELECT] key. The PTY select mode is turned on.
- 2. Select a desired PTY.
- Press the [▶] or [◄] of button. If you press the [▶] button, the unit seeks a PTY broadcast moving up the frequencies; if you press the [◄] button, it seeks moving down the frequencies.
 - * If no station with the selected PTY broadcast can be received, the unit returns to PTY select mode.

PTY preset memory

- Touch the [PTY SELECT] key in the MENU screen and touch the [PRESET] key. The PTY select mode is turned on.
- 2. Select a desired PTY.
- If you press and hold any one of the [DIRECT] buttons for 2 seconds or longer, the selected PTY is stored into that preset channel memory.
 - * The PTY items are same as in RDS operation.

Emergency broadcast

If an emergency broadcast is received, all the function mode operations are stopped.

- "ALARM" appears in the display and the emergency broadcast can be heard.
- * RDS interrupt does not function during AM radio reception or in TV mode.

Digital Radio/DAB Operations

Cancelling an emergency broadcast

Touch the [DAB MODE] key in the MENU screen and the [AF] key appears in the display. If you touch the [AF] key, emergency broadcast reception is cancelled.

Volume setting of TA, emergency broadcast (ALARM), information and PTY

The volume for TA, ALARM, information and PTY interrupts can be set during TA, ALARM or PTY interrupts.

* The factory default setting is "15".

During a TA, ALARM or PTY interrupt, operate the [VOL] button upward or downward to set the volume to the desired level (00 to 33).

* When the TA, ALARM, information or PTY interrupt ends, the volume returns to the level it had before the interrupt.

Dynamic Label Function

A dynamic label (hereinafter referred to as "DLS") is a text data associated with each DAB service. This set can display DLS up to 128 characters in a display.

* This function is enabled only when the panel is open.

DLS display mode

Touch the [DLS MODE] key in the MENU screen to place in the DLS display mode. To cancel the DLS mode and return to the previous display, touch the [RTN] key. If there is a DLS data in the reception service, DLS text is displayed in the text displaying area.

DLS memory

Up to six DLSs, currently being received, can be stored. Touch the [DLS MODE] key in the MENU screen. Touch the [P.SET] key and touch and hold the [DLS MEMO1] to [DLS MEMO6] key for 2 seconds or longer, and the DLS page currently being displayed is stored.

DLS Calling

To call the DLS stored in the DLS memory, press the [DIRECT] button. The DLS in the DLS memory is displayed by 16 characters (2 lines) at the intervals of 5 seconds (automatic calling). To display at shorter intervals, press the

[DIRECT] button while waiting for successive DLS character string to be displayed, the following DLS character string is displayed (manual calling).

NAVI Operations

NAVI functions

When Clarion Navigation (hereinafter referred to as NAVI) is connected, the following functions are enabled:

- Showing the NAVI display:
- · Operation is available by using the panel side buttons.
- NAVI guidance sound interruption;
- · Remote operation of navigation functions by the remote controller through the optic sensor.
- * If the operation of this unit is interrupted by a NAVI operation, audio is switched to OFF.
- * If the operation of this unit is interrupted by a NAVI operation when the panel is closed, the sub-LCD display is turned to "NVG".

Setting Clarion NAVI as external input equipment

Be sure to perform this setting after connecting Clarion NAVI.

- * The factory default setting is "CLARION".
- 1. When the panel is open, press the [ADJ] button to show the adjustment selection display.
- Touch the [▼] key.

Touch the [CONNECT] key to select the following items:

- "CLARION": Setting when Clarion NAVI is connected to the NAVI and RGB terminal.
- "RGB": Setting when a RGB image of other company's equipment is connected to the RGB terminal.
- "COMPOSITE": Setting when a composite image of other company's equipment is connected to the navi terminal.
- "OTHERS": Setting when an external device other than a navigation system is connected to the VISUAL 2 terminal.
- 3. Touch the [CLARION] key to set connection of Clarion NAVI.

Note:

 When the CLARION NAVI is connected with the unit, be sure to set to "CLARION". Failure to set to "CLARION" results in malfunction.

NAVI operation

Changeover between NAVI display and Audio/ Visual (hereinafter referred to as AV) displays. When the panel is open, the [N/A] button has the same function as the [N/A] button on the NAVI remote controller to set a screen mode and a NAVI interruption.

Operate this button to change over between NAVI and AV displays.

* When the NAVI Display/NAVI guidance sound interruption setting (NAVI operation) is turned to the NAVI/NAVI mode on this unit, the audio sound is not heard.

When the [N/A] button is pressed, the screen and audio statuses are changed cyclically as follows:

 $NVG \rightarrow NVG + RGM \rightarrow AV \rightarrow NVG$

After a route calculation is done, however, the cycle is changed as follows:

NVG → NVG-INT → NVG + BGM → AV → NVG.

NVG: Screen status NAVI. Audio status NAVI. NVG-INT: Screen status Audio. Audio status audio

Note that in case of a NAVI interruption the screen and audio statuses are both changed to NAVI.

NVG + BGM: Screen status NAVI, Audio status audio

Note that in case of a NAVI interruption the audio status is changed to NAVI.

AV: Screen status audio, Audio status audio

When the NAVI display is shown with the panel open. For the functions of the buttons for navigation control, see "3. NOMENCLATURE".

- These buttons become normal audio operating buttons when changing into the AV display using the [N/A] button.
- · If the receiver for remote control unit on the CLARION NAVI is used, only the remote control unit for NAVI comes effective and operation using the NAVI operating buttons on the panel of the unit cannot be performed. (For the NAVI operating buttons, refer to the section "3. NOMENCLA-TURE".)
- · Set the NAVI side audio setting level to any setting parameter value lower than 2.

Connecting other company's image equipment

RGB type or composite type images from other company's equipment can be displayed on this unit

Be sure to perform this setting after connecting the RGB type or composite type image equipment to the RGB terminal.

- 1. When the panel is open, press the [ADJ] button to show the adjustment selection display.
- 2. Touch the [▼] key. Touch the [CONNECT] key to select the following items:
- 3. Touch the [RGB] key or [COMPOSITE] key to select "RGB" or "COMPOSITE".

Display changeover

When the panel is open, it is possible to change over between AV display and external equipment display using the [N/A] button.

Other Functions

Always turning on the button illumination on the operation panel Note:

- The following operation is enabled when the panel is open.
- Doing this operation turns on and off the illunination only for the buttons of VoL [+] and [-]. [DISP], and [OPEN].

The button illumination on the operation panel when the display is turned upward, can be switched between "ON" and "OFF".

The factory default setting is ON.

- "OFF": Button illumination on the operation panel turns on for 5 seconds:
- ●"ON": Button illumination is always on when the power is turned on;
- 1. When the panel is open, press the [ADJ] button to show the ADJUST MODE menu.
- Touch the [] key to select "UPPER ILLUMI".
- 3. Touch the [UPPER ILLUMI] key to select "ON" or "OFF".
- 4. Touch the [ON] or [OFF] key for setting.
- Press the [ADJ] button or touch the [RTN] key to return to the previous mode.
 - * To set "ON" again, switch "OFF" to "ON" manually.

Entering titles

Titles up to 10 characters long can be stored in memory and displayed for TV stations and CD changer. The numbers of titles that can be entered for each mode are as follows.

Mode	Number of titles
TV mode	15 titles
CD changer mode	Number of titles

CD changer mode	Number of titles
DCZ628 connected	100 titles
CDC655z connected	60 titles
CDC655Tz connected	100 titles
CDC1255z connected	50 titles

- * You cannot enter titles with the unit in Seek. Preset Scan, Auto store (TV) mode. Cancel each of those operations before entering titles.
- 1. Press the [FUNC] button to select the mode you want to enter a title (CD changer or TV).
- 2. Select and play a CD in the CD changer or tune in to a TV station for which you want to enter the title.
- 3. Touch the screen or press the [LIST] button, the MENU screen appears.

- Touch the [TITLE INPUT] kev in the MENU screen. The title input mode display appears.
- 5. Touch the characters, symbols, etc. shown in the display to input titles.

"→⊢" : Centering "BS" : Backspace "□" : Space "MEMO" : Memory "▼(▲)" : Scroll

Note:

- Up to 10 characters can be input.
- To switch the character types, touch the scroll key (▼) at the lower left of the display.
- 6. Touch the [MEMO] key for 2 seconds or longer to store the title into memory and cancel title input mode.
- 7. Repeat the step 4 to enter the complete title.

Title list play

You can display a list of titles, then select the disc or broadcast station to listen to from that list.

- * You can not display a title list with the unit in Seek, Preset Scan, Auto store (TV) mode. Cancel those operation modes before to display a title list.
- 1. With the unit in DVD/CD/MD changer or TV mode, touch the [P. CH SELECT], [DISC SELECTI key. A title list is displayed. The following functions can be carried out in a title list display.
 - DVD/CD/MD changer: DISC titles for discs 1 to 6 are displayed (By changing over a display page in case of 12-CD changer. disc 7 to 12 can be displayed). When there is not any disc in a changer, "NO DISC" is displayed.
 - ●TV: A title of a channel stored in the presets 1 to 6 or a channel number is displayed.
- 2. Touch the [DIRECT] key (1 to 6) to select one of the items 1 to 6 and reproduce the selected broadcast station or disc.
 - * In case of 12-CD changer, touch the [DISC **SELECT**] key to change over to a list display of discs 7 to 12.
- 3. Touch the [RTN] key again to return to the previous mode.

Setting the auto dimmer

The brightness of the color LCD display is adjusted automatically in proportion to the surrounding light. The auto dimmer function can switch between ON and OFF.

ON : Auto dimmer function is set.

OFF: Auto dimmer function is cancelled.

- * The factory default setting is "ON".
- 1. Press the [ADJ] button to display the ADJUST MODE menu.
- 2. Touch the [AUTO DIMMER] key to select "ON" or "OFF".
- Touch the "ON" or "OFF" key for setting.
- 4. Press the [ADJ] button or touch the [RTN] key to return to the previous mode.

Adjusting the dimmer level

You can adjust the reduced illumination level of the dimmer. When driving at night with the inside of the car, the auto dimmer function can reduce the display illumination linked "to the illumination power supply of the car" in this unit in order to prevent glare from the display.

- * This function is enabled only when the auto dimmer function is set up to "OFF".
- The factory default:

When the car light is off: Brightest setting When the car light is on: Medium brightness

- 1. When the panel is open, press the [ADJ] button to display the ADJUST MODE menu.
- 2. Touch the [DIMMER LEVEL] key to adjust the dimmer level.
- 3. Touch the [+] or [-] key to adjust.
- 4. Press the [ADJ] button again or touch the [RTN] key two times.

The unit returns to the previous mode.

Setting the button illumination

- * The factory default setting is "RED" (red).
- 1. When the panel is open, press the [ADJ] button to select the ADJUST MODE menu.
- 2. Touch the [] key to select "KEY ILLUMI".
- Touch the [KEY ILLUMI] key to select "RED" (red) or "GREEN" (green).
- 4. Touch the [RED] or [GREEN] key to select a desired mode and set it.
- 5. Press the [ADJ] button again or touch the [RTN] key. The unit returns to the previous mode.

Setting the beep

- * The sound heard when you make operations is called "beep". The unit can be set up so that it does not produce this beep sound.
- * The factory default is "BEEP ON".
- 1. When the panel is open, press the [ADJ] button to select the ADJUST MODE menu.
- Touch the [I] key to select "BEEP".
 Touch the [BEEP] key to select "ON" and "OFF".
- Touch the [ON] or [OFF] key to select a desired mode and set it.
- 4. Press the [ADJ] button again or touch the [RTN] key. The unit returns to the previous mode.

Setting the motion and sprite pattern speed

- * The factory default setting is "HIGH" (high).
- 1. When the panel is open, press the [ADJ] button to select the ADJUST MODE menu.
- Touch the [MOTION SENS] key to select "HIGH" (high) or "MID" (mid) or "LOW" (low).
- Touch the "HIGH" (high) or "MID" (mid) or "LOW" (low) key to select a desired mode and set it.
- Press the [ADJ] button again or touch the [RTN] key. The unit returns to the previous mode.

Setting the visual input sound level

You can adjust an input sound level of visual1/2.

- * The factory default setting is "HIGH"(high).
- Press the [ADJ] button to display the ADJUST MODE menu.
- Touch the [] key to select "VISUAL AUX SENS".
- Touch the [VISUAL AUX SENS] key to select "HIGH"(HIGH) or "MID"(mid) or "LOW"(low).
- Touch the "HIGH" or "MID" or "LOW" key to select desired mode and set it.
- 5. Press the [ADJ] button or touch the [RTN] key to return to the previous mode.

Anti-theft indicator

The red Anti-theft indicator is a function for preventing theft. When the DCP is removed from the unit, this indicator blinks.

- * The factory default setting is "OFF".
- 1. When the panel is open, press the [ADJ]

- button to select the ADJUST MODE menu.
- Touch the [1] key to select "BLINKING LED". Touch the [BLINKING LED] key to select "ON" and "OFF".
- Touch the [ON] or [OFF] key to select a desired mode and set it.
- Press the [ADJ] button again or touch the [RTN] key. The unit returns to the previous mode.

Setting Auto Volume

- When the panel is open, press the [ADJ] button to select the ADJUST MODE menu.
- Touch the [] key to select "AUTO VOL CALIBRATE".
 - Touch the [AUTO VOL CALIBRATE] key to display the [START] key.
- Keep driving speed 50 km/h and press the [START] key.
- 4. **[EXECUTING ...**] is flash for 2 seconds in display.
- If calibration is successful, display indicates [SUCCESS] and sound long beep.
 If calibration is not successful, display indicates [FAILED] and sound 2 times a short beep. If you failed, touch the [OK] key.

Note:

 When installing this device or transferring it into another vehicle, for sake of safety, always have this work done by the store of purchase or your nearest Clarion dealer. Installation requires specialized techniques and experience.

This function is not available when speed pulse cord is not connected between this unit and the vehicle.

Setting Auto Volume Sensitivity

This function is only available calibration succeeded in setting Auto Volume.

- * The factory default setting is "LOW".
- Press the [ADJ] button to select the ADJUST MODE menu.
- 2. Touch the [] key to select "AUTO VOL SENSE".

Touch the [AUTO VOL SENSE] key.

- 3. Touch the [▲] key or [▼] key to select a desired sensitivity.
 - OFF ← LOW → MID-L → MID → MID-H → HIGH
- 4. Press the [ADJ] button again or touch the [RTN] key to return to the previous mode.

Setting the Auto Panel

When you turn on or off the power, you can set the liquid crystal panel automatically housing or opening.

- * The factory default setting is "OFF".
- 1. Press the [ADJ] button to select the ADJUST MODE menu.
- Touch the [] key to select "AUTO PANEL". Touch the [AUTO PANEL] kev.
- 3. Touch the [ON], [OFF] or [CLOSE] key to set it.

ON:

The liquid crystal panel houses automatically after turning off the power, removing the DCP.

And the liquid crystal panel open automatically after turning on the power, attaching the DCP.

OFF: Normal operation.

CLOSE: The liquid crystal panel houses automatically after turning off the power, removing the DCP.

4. Press the [ADJ] button again or touch the [RTN] key to return to the previous mode.

Cellular phone interrupt setting

If you connect this unit and your cellular phone with a separately sold cable, you can listen to your telephone calls on your car speakers.

- * The factory default setting is "OFF".
- 1. Press the [ADJ] button to select the ADJUST MODE menu.
- Touch the [TEL] key to select "TEL SWITCH". Touch the [TEL SWITCH] key to select "ON", "OFF" and "MUTE".

OFF:

This unit continues normal operation even when the cellular phone is used.

Note:

· When the setting is OFF, disconnect the cellular phone from the cable or turn off the power of the cellular phone.

ON:

You can listen to your telephone calls from the speakers connected to this unit.

* When listening to your calls on your car speakers, you can adjust the volume by operating the [VOL] button.

MUTE:

The sound from this unit is muted during telephone calls.

- 3. Touch the [ON], [OFF] or [MUTE] key to select a desired mode and set it.
- Press the [ADJ] button again or touch the [RTN] key to return to the previous mode.
- * This function is not compatible with all cellular telepones. Contact your local authorized Clarion dealer for information on proper installation and compatibility.

Setting the car speaker output for the cellular phone

- * The factory default setting is "RIGHT".
- * To output the telephone calls, set the cellular phone interrupt to ON.
- Press the [ADJ] button to select the ADJUST MODE menu.
- 2. Touch the [TEL] key to select "TEL SP". Touch the [TEL SP] key to select "LEFT" and "RIGHT".

●I FFT·

Telephone calls can be heard on the left speaker connected to this unit.

RIGHT:

Telephone calls can be heard on the right speaker connected to this unit.

- 3. Touch the [LEFT] or [RIGHT] key to select a desired mode and set it.
- 4. Press the [ADJ] button again or touch the [RTN] key to return to the previous mode.

Note:

· During cellular phone interrupt, speakers setting is impossible.

5.1 ch Surround Decoder Operations

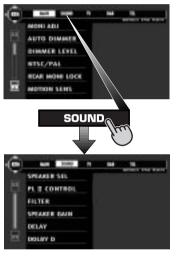
5.1 ch Surround Decoder control function

This function is available when a 5.1 ch Surround Decoder (DVH923) is connected.

When the 5.1 ch Surround Decoder (DVH923. sold separately) is CeNET connected, the 5.1 ch Surround Decoder Control unit (DVC923, sold separately) cannot be used.

This section describes operation procedures only. For other details, refer to the owner's manual supplied with the 5.1 ch Surround Decoder.

- * For details on functions of each mode, refer to the owner's manual supplied with the DVH923.
- 1. Press the [ADJ] button to show the ADJUST MODE menu.
- Touch the [SOUND] kev.



Touch the required keys to make the desired

SPEAKER SEL (speaker sel)

This function determines center speaker, surround speaker and sub woofer connection.

- 3-1 Touch the [SPEAKER SEL] key to show the submenu.
- 3-2 Touch the [CENTER SP], [SURROUND SP] or [SUB WOOFER] key and the "ON" or "OFF" key to turn speakers on or off depending on what speakers are connected.
 - The default value is "ON".
 - The phase of the "SUB WOOFER" is reversed in the ON- setting. The default value is "ON+".

PL II CONTROL

- * This function is available only when the MUSIC MODE is selected for Dolby PL II. For setup details, see "Selecting the Dolby PL II (Dolby Pro Logic II) type."
- 3-1. Touch the [PL II CONTROL] key to show the submenu.
- 3-2. Touch the [PANORAMA], [DIMENSION] or [CENTER WIDTH] key to select respective

[PANORAMA]:

Touch the [ON] or [OFF] kev. "OFF" is the default value.

[DIMENSION]:

Touch the $[\blacktriangle]$ or $[\blacktriangledown]$ key to make adjustments between 0 and 6. The default value is "3".

[CENTER WIDTH]:

Touch the [▲] or [▼] key to make adjustments between 0 and 7. The default value is "3"

● FII TFR

This function is used to select filter frequencies that suit the speakers that are used.

- * This function is not available for speakers whose SPEAKER SEL setting is set to OFF.
- 3-1. Touch the [FILTER] key to show the submenu.
- 3-2. Touch the [FRONT HPF], [CENTER HPF], [SURROUND HPF] or [SUB WOOFER LPF] key to set respective item.
- Touch [▲] or [▼] key to make settings. [FRONT HPF]:

This function can be set to the following four settings: 50 Hz. 80 Hz. 120 Hz or THROUGH. "THROUGH" is the default value.

[CENTER HPF]:

This function can be set to the following three settings: 50 Hz. 80 Hz and 120 Hz. "120 Hz" is the default value.

[SURROUND HPF]:

This function can be set to the following four settings: 50 Hz, 80 Hz, 120 Hz or THROUGH, "THROUGH" is the default value.

[SUB WOOFER LPF]:

This function can be set to the following three settings: 50 Hz, 80 Hz and 120 Hz. "120 Hz" is the default value.

●SPEAKER GAIN

This function sets speaker output level.

- * This function is not available for speakers whose **SPEAKER SEL** setting is set to OFF.
- Touch the [SPEAKER GAIN] key to show the submenu.
- 3-2. Touch the [FRONT L], [CENTER], [FRONT R], [SURROUND R], [SURROUND L] or [SUB WOOFER] key to set respective item
- 3-3. Touch the [▲] or [▼] key to make adjustments in the range -10 dB to +10 dB in 1 dB step increments. The default value is "0 dB"

DELAY

This function adjusts the timing of the speakers so that they are synchronized with front speaker output.

- * This function is not available for speakers whose "SPEAKER SEL" setting is set to OFF.
- 3-1. Touch the [**DELAY**] key to show the submenu.
- 3-2. Touch the [CENTER SP] or [SURROUND SP] key to set respective item.
- 3-3. Touch the [▲] or [▼] key to adjust. [CENTER SP]:

Adjustments are made in the range 0 ms to 5 ms. The default value is "**0 ms**".

[SURROUND SP]:

Adjustments are made in the range 0 ms to 15 ms. The default value is "**0 ms**".

DOLBY D

This function sets the dynamic range compression.

- * This function is not available for speakers whose "SPEAKER SEL" setting is set to OFF.
- Touch the [DOLBY D] key to show the submenu.
- Touch the [MAX], [STD] or [MIN] key to select respective item.
 - * The default value is [MAX].
- When all settings are completed, press the [ADJ] button or touch the [RTN] key to return to the previous mode.

Output adjustment of subwoofer volume, center volume and balance/fader

- Press the [A-M] button and touch the [DETAIL] key.
- 2. To make an adjustment on:

Subwoofer volume adjustment

- 2-1. Touch the [SUBWOOFER VOL] key, then touch the [▲] or [▼] key to adjust to desirable level.
 - * The factory default setting is "**0**". (Setting range: -6 to 3)

Center volume adjustment

- 2-1. Touch the [CENTER VOL] key, then touch the [▲] or [▼] key to adjust to desirable level.
 - * The factory default is "**0**". (Setting range : -6 to 0)

● Balance/Fader adjustment

- 2-1. Touch the [BAL/FAD] key.
 - Touch the [▲] or [▼] key to adjust the balance level
 - [**\Lambda**] key: emphasized the sound from the front speakers.
 - [▼] key: emphasized the sound from the rear speakers.
- 2-2. Touch the [◀] or [▶] key to adjust the fader level.
 - [] key : emphasized the sound from the left speakers.
 - [] key : emphasized the sound from the right speakers.
- When the adjustment is complete, touch the [RTN] key or press the [A-M] button to return to the STANDARD screen

DSF mode

DSF effect ON/OFF

- * The factory default setting is "OFF".
- 1. Press the [A-M] button.
- 2. Touch the [STATUS] key to select "ON" and "OFF".
- 3. Each time the [ON/OFF] key is touched, the on and off statuses are switched alternately.
- 4. After the setting, press the [A-M] button again or touch the [RTN] key to return to the STANDARD screen.

Note:

• If the DSF effect is set to OFF, the adjustment made in "DSF" is not reflected in the music source.

Selecting the DSF type

- Press the [A-M] button and touch the [DSF] key.
- 2. Touch the key for the desirable type to select it.
- 3. When the setting is finished, touch the [RTN] key or press the [A-M] button to return to the previous mode.

P.EQ mode

P.EQ effect ON/OFF

- * The factory default setting is "OFF".
- 1. Press the [A-M] button.
- 2. Touch the [STATUS] key to select "ON" and "OFF".
- 3. Each time the [ON/OFF] key is touched, the on and off statuses are switched alternately.
- 4. After the setting, press the [A-M] button again or touch the [RTN] key to return to the STANDARD screen.

Note:

 If the P.EQ effect is set to OFF, the adjustment made in "P.EQ" is not reflected in the music source.

Setting and storing P.EQ Properties

- Press the [A-M] button to show the AUDIO MODE menu.
- 2. Touch the [P.EQ] key to show the P.EQ adjusting display.
- 3. Touch the key for the desirable type to select it. The P.EQ adjustment contents are as follows:

SIGNAL

* The factory default setting is "P.NOISE".

This function selects [P. NOISE] or [MUSIC].

● SPEAKER SELECT

* The factory default setting is "FRONT".

This function selects [FRONT], [CENTER] or [SURROUND].

●"BAND"

* The factory default setting is "BAND1".

Select the channel to be compensated (BAND1, BAND2, BAND3).

"FREQUENCY"

* The factory default setting is "1 kHz".

Select the center frequency that you want to compensate from the range of 20 Hz to 20 kHz. (1/3 octave step, 31 points)

●"Q"

* The factory default setting is "1".

Set the sharpness of the Q-curve to one of the parameters: 1, 3, 5, 7 and 20.

●"GAIN"

* The factory default setting is "0".

Adjust the gain (output level) in the range of -12 dB to +12 dB. (1 dB step, 25 points)

4. After making adjustments to a desired pattern by repeating the operations of item3, touch the [RNT] key or press the [A-M] button to return to the previous mode.

Selecting the Dolby PLII (Dolby Pro Logic II) type

- 1. Press the [A-M] button and touch the [Dolby PLII] key.
- 2. Touch the key for the desirable type to select
- 3. When the setting is finished, touch the [RTN] key or press the [A-M] button to return to the previous mode.
 - * The factory default is "off".

11. IN CASE OF DIFFICULTY

	Problem	Cause	Measure	
	Power does not turn on. (No sound is produced.)	Fuse is blown.	Replace with a fuse of the same amperage. If the fuse blows again, consult your store of purchase.	
		Incorrect wiring.	Consult your store of purchase.	
GENERAL	Nothing happens when buttons are pressed. Display is not accurate. The microprocessor has malfunctioned due to noise, etc.		Turn off the power, then press the [RELEASE] lever and remove the DCP. Press the reset button both of tuner amp unit and main unit for about 2 seconds with a thin rod. Note: When the reset button is pressed, turn off the ACC power. Tuner Amp Unit Main Unit The Reset button	
			* When the reset button is pressed, frequencies of TV/radio stations, titles, etc. stored in memory are cleared.	
	The remote controller does not work.	Direct rays of the sun fall on the light-receptive part of the remote controller.	When direct rays of the sun fall on the light-receptive part of the remote controller, it may not work.	
		The batteries of the remote controller unit are dead or there is no battery in the remote controller unit.	Check the batteries of the remote controller unit.	
	Disc cannot be loaded.	Another disc is already loaded.	Eject the disc before loading the new one.	
		There is a foreign matter already in place.	Eject the foreign matter forcibly.	
Ļ	Sound skips or is	Compact disc is dirty.	Clean the compact disc with a soft cloth.	
DVD Player	noisy.	Compact disc is heavily scratched or warped.	Replace with a compact disc with no scratches.	
	Sound is bad directly after power is turned on.	Water droplets may form on the internal lens when the car is parked in a humid place.	Let dry for about 1 hour with the power on.	
	Disc cannot play with the display "PARENTAL VIOLATION" shown.	The view is limited.	Release the view limitation or change the parental level. See the subsection "Setting up the parental level".	

	Problem	Cause	Measure
	The image is not displayed.	The parking brake is not pulled.	Check that the parking brake is applied.
	The display is dark.	The brightness control is too low.	Adjust the brightness properly.
		The operating condition is not good.	The temperature inside the vehicle may be 0°C or less. Set to an appropriate temperature (25°C or so) and check it again.
		The headlight of the vehicle is lit.	The display is made dark at night to prevent the glare (When the headlight of the vehicle is lit in the daytime, the display gets dark).
	The color of the display is light or a shade of color is not good.	The color is not adjusted adequately.	Check that COL and HUE are adjusted properly.
≥	When the VTR is connected, the image is disturbed.	Improper NTSC/PAL setting	Set the NTSC/PAL properly according to the VTR.
	When the TV tuner is connected, the image gets unclear.	Bad receiving condition	A radio wave may not reach sufficiently due to obstruction of mountains or buildings. Check it again at a place where a radio wave can be received properly.
	The TV tuner has a double or triple image.	Bad receiving condition	It may be under the influence of radio wave reflected by mountains or buildings. Check it again after changing place or direction.
	The TV tuner has spots or stripes in the image.	Presence of jamming	It may be under the influence from automobiles, streetcar, power cable, neon sign, and so forth. Check it again after changing place.
	There are red, green, and blue points in the display.		This is not a failure, but a phenomenon peculiar to a liquid crystal panel (The LCD panel is produced according to technology with very high precision. Note that, though there are effective pixels of 99.99% or more, pixel missing or normally lit pixels account for 0.01%).

12. ERROR DISPLAYS

		Cause	Measure
ĒR	ERROR 2	A CD is caught inside the CD deck and is not ejected.	This is a failure of CD deck's mechanism and consult your store of purchase.
) PLAYER	ERROR 3	A CD cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped-disc.
DVD	ERROR 6	A CD is loaded upside-down inside the CD deck and does not play.	Eject the disc then reload it properly.
SER	ERROR 2	A CD inside the CD changer is not loaded.	This is a failure of CD changer's mechanism and consult your store of purchase.
CHANGER	ERROR 3	A CD inside the CD changer cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped-disc.
CD	ERROR 6	A CD inside the CD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
	ERROR H	Displayed when the temperature in the MD changer is too high and playback has been stopped automatically.	Lower the surrounding temperature and wait for a while to cool off MD changer.
IGER	ERROR 2	An MD inside the MD changer is not loaded.	This is a failure of MD changer's mechanism and consult your store of purchase.
CHANGER	ERROR 3	An MD inside the MD changer cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped-disc.
MD	ERROR 6	An MD inside the MD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
		Displayed when a non-recorded MD is loaded in the MD changer.	Load a pre-recorded MD in the MD changer.

For the DVD changer, refer to the Owner's Manual provided with the DVD changer.

If an error display other than the ones described above appears, press the RESET button. If the problem persists, turn off the power and consult your store of purchase.

* When the reset button is pressed, frequencies of TV/radio stations, titles, etc. stored in memory are cleared.

13. SPECIFICATIONS

FM Tuner

Frequency Range:

87.5 MHz to 108.0 MHz (0.05 MHz steps)

AM Tuner

Frequency Range:

MW: 531 kHz to 1602 kHz (9 kHz steps) LW: 153 kHz to 279 kHz (3 kHz steps)

DVD player

System:

Digital Versatile Disc System with CDDA

capable

Usable discs: DVD video disc, Compact disc

Frequency Response:

20Hz to 22 kHz (48 kHz) (±1 dB)

20Hz to 20 kHz (CD) (±1 dB)

Signal to Noise Ratio: 100 dB (1 kHz) IHF-A

Dynamic Range: 100 dB (1 kHz)

Distortion: 0.01%

Audio Amplifier

Rated power output:

18 W \times 4 (20 Hz to 20 kHz, 1%, 4 Ω)

Maximum power output: 200 W

 $(50 \text{ W} \times 4 \text{-} \text{JEITA})$

Speaker impedance: 4 Ω (4 to 8 Ω)

Input

Audio input:

130 ±60mVrms (High)

600 ±80mVrms (Mid)

840 ±100mVrms (Low)

(input impedance $10k\Omega$ or greater)

Video input:

 $1.0 \pm 0.2 \text{ Vp-p}$ (input impedance 75 Ω)

RGB input:

Video: 0.7 + - 0.2 Vp-p (input impedance 75 Ω)

0.3 V (+0.9 / -0.1) Vp-p Synchronize:

(input impedance: 75 Ω)

Video output

Video output:

 $1.0 \pm 0.2 \text{ Vp-p}$ (output impedance 75 Ω)

LCD Monitor

Screen Size: 7-inch wide type

(152 mm Width × 85 mm Height)

Display method:

Transmission type TN liquid crystal display

Drive method: TFT (thin-film transistor) active matrix driving

Pixels: 336,960 (1440 × 234)

General

Power source voltage:

14.4 V DC (10.8 to 15.6 V allowable)

Ground: Negative

Current consumption: 4.0 A (1 W)

Auto Antenna Rated Current: 500 mA less

Dimensions of the Main Unit:

178 mm width × 50 mm Height ×

165 mm Depth

Dimensions of the Tuner Amp Unit:

178 mm width × 37.5 mm Height ×

209.5 mm Depth

Weight of the Main Unit: 2.3 kg

Weight of the Tuner Amp Unit: 1.1kg

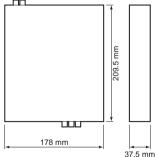
Dimensions of the Remote Control Unit: 54 mm width × 28.8 mm Height ×

155 mm Depth

Weight of the Remote Control Unit: 70 g

Main unit 165 JI. 30 172 mm 50 mm 178 mm





Notes:

- · Specifications comply with JEITA Standards.
- Specifications and design are subject to change without notice for further immprovement.