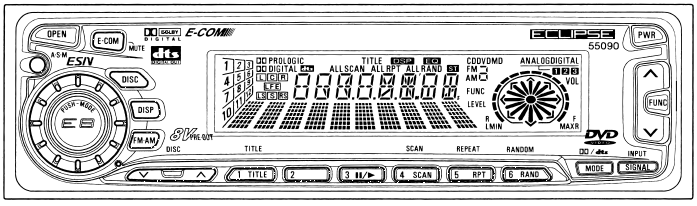
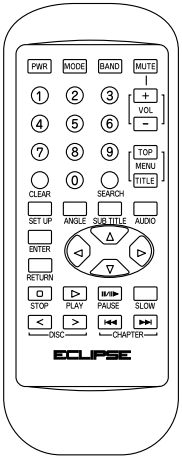
ECLIPSE®

by FUJITSU TEN





MODEL 55090

ESN E8 DVD TUNER WITH CDC/E-COM/DSP CONTROL AND REMOTE

OWNER'S MANUAL

We appreciate your purchase of this tuner.
Please read through this manual for correct operation.
We suggest that after reading it you keep this manual
in a safe place for future reference.

For your safety in using the 55090

Warnings and caution signs, illustrated below, are posted throughout this manual as well as on the 55090. They show safe and correct ways to handle the product so as to prevent personal injury to you and others and avoid damage to property.

Before reading through the manual, take time to read through and learn the important information listed in this section.

⚠ Warning	This sign indicates a situation in which incorrect handling through disregard of a sign might result in death or serious personal injury.
⚠ Caution	This sign indicates a situation in which incorrect handling through disregard of a sign might result in personal injury or may result solely in damage to property.

⚠ Warning

- Do not modify this system for use other than that specified herein. Also, do not deviate from the installation procedures described herein; Eclipse will not be held liable for damages including, but not limited to serious injury, death or property damage resulting from installations that enable unintended operation.
- This unit is intended for operation in DC 12-volt, negative-grounded vehicles only. Never use it in 24-volt vehicles such as heavy trucks or diesel cars with cold-region specifications.
- Do not change CDs while driving. Doing so may result in an accident.

⚠ Warning

- Do not place the vinyl storage bag over a person. It may cause a serious accident or death by suffocation.

- Do not adjust the controls while driving the car. To adjust the controls, stop the car in a safe location.

- To prevent accidents, store batteries for the remote control out of the reach of small children. In case a child swallows a battery, consult a physician immediately.

- Do not disassemble or rebuild this product. Doing so may cause an accident, fire or electrical shock.

- When it is necessary to replace the fuse, always use a fuse of the correct rating (number of amperes). Use of fuses with higher amperage ratings may cause a fire.

- Do not operate the product in a malfunctioning condition, for instance, when the audio does not play. Doing so may result in an accident, fire or electrical shock.

- If an abnormal situation occurs, such as foreign matter entering or liquid splashing on the product, or smoke or a strange odor emitting from the unit, shut off the product immediately and consult the dealer from whom you purchased it. Continued operation may cause an accident, fire or electrical shock.

- Do not install this product in locations where it may interfere with the operation of the steering wheel, shift lever, brake pedal, etc. Otherwise, an accident or injury may result.

- To prevent damaging the vehicle, confirm the locations of hoses, electrical wiring, and the fuel tank prior to drilling holes to install this product. Also, take care so that the product dose not interfere, nor come in contact with them. Otherwise, a fire may result.

⚠ Warning

- When installing this product, never use the existing nuts or bolts that secure parts of the fuel tank, or the steering or braking system. Otherwise, improper steering or braking or a fire may result.

- To prevent a short circuit from occuring, disconnect the battery's negative terminal before installing this product. Otherwise, an electric shock or injury may result

- When using an existing nut and/or bolt from the vehicle to ground this product, do not use any that secure parts of the steering or braking systems. Otherwise, an accident may results.

- Bundle cables and harnesses with electrical tape or wire ties to prevent them from interfering with moving parts. If they should entangle the steering wheel, shift lever or brake pedal, an accident may result.

- Never supply power to another electrical appliance by splicing or tapping into this product's power lead(wire). Otherwise, the current capacity of the wire will be exceeded, resulting in a fire or electric shock.

- Never attempt to disassemble or modify the product. Otherwise, an accident, fire or electric shock may result.

⚠ Caution

- Play the audio at a moderate volume level that permits you to hear sounds from outside the car. Driving without being able to hear outside sounds may result in an accident.

- Keep foreign objects out of the disc slot. They may cause fire or electrical shock. Another possibility is that discs may be damaged or become stuck.

⚠ Caution

- Do not stick your fingers or hands into the disc slot. Doing so may cause personal injury.

- This product must be operated only as on-board equipment, or it may cause electrical shock or injury.

- Do not play distorted sounds for long periods of time; the speakers may overheat and cause a fire.

- This product uses an invisible laser light. In case a problem develops, be sure to consult the dealer from whom you purchased the product. Do not disassemble or rebuild the unit; rebuilding it may expose you and others to a dangerous laser emission (which would damage eyesight) or cause an accident.

- Never use batteries other than those specified. Do not mix new and old cells. Doing so may cause a fire or personal injury due to a battery explosion or chemical leaks.

- Pay attention to the (+) and (-) polarity of the battery when installing them in the product. Incorrect installation may cause personal injury or product damage spoilage due to a battery explosion or chemical leakage.

- For best results, this product should be installed by a professional installer. Contact the dealer whom you purchased the product for an appointment.

- When installing this product, be sure to use the supplied mounting hardware. If parts other than those supplied are used, the unit may be damaged internally, or may not be held in place securely and become dislodged.

- Avoid installing this product in places where it may get wet, such as near windows, or in places that are moist or dusty. Presence of liquid, moisture or dust inside this product can cause short circuiting, resulting in smoke or fire.

⚠ Caution

- Do not install this product in locations where it cannot be fastened securely, such as places subject to frequent vibration. Otherwise, it may become dislodged and cause an accident or injury.

- If this product is not connected properly, a short circuit, fire or accident may occur.

- When routing cables, use care so that they do not contact sharp metal parts such as brackets or screw tips. Otherwise, a short circuit, electric shock, fire or accident may result.

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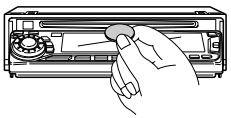
u Operating precautions

<Your 55090 will perform well over a long period of time through correct handling and care.>

Notes on operation

- For your safety, play only at volume levels that allow outside sounds to be heard.

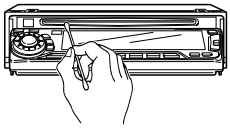
- This player can only play CDs and DVDs bearing the logo shown at the left.
- It may not be possible to play back some tracks on CD-Rs.
- It may not be possible to play back CD-Rs with certain characteristics, or CD-Rs which are scratched, dirty, or which have been left inside a vehicle for long periods.
- CDs cannot be played back until all sessions recorded on the CD-R have been closed.
- CD-RW discs cannot be played back.
- This player can only play CDs and DVDs bearing the logo shown at the left.



- Never insert anything other than a CD or DVD into the disc slot.
  Do not insert any foreign objects, such as coins or credit cards, into the disc slot. Be especially watchful of children's mischief in this regard.

- Avoid severe mechanical shock.
  When the player is subjected to severe vibration while traveling over a rough surface, playback may be intermittent. When a situation like this occurs, resume playback after returning to a smoother road.

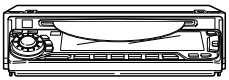
- About dew condensation.
  In cold or rainy weather, just as the interior glass surface gets fogged, dew (water condensation) may also settle on the deck. When this occurs, disc playback may become intermittent or impossible. Dehumidify the air in the vehicle for a while before resuming playback.



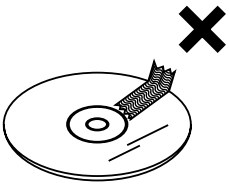
- Cleaning the disc slot.
  The disc slot tends to get dusty. Clean it occasionally to prevent accumulated dust from scratching the discs.

About CDs and DVDs

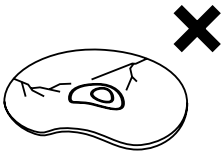
- The signal recorded on a disc is read by a laser beam, so nothing touches the disc surface. A scratch on the recorded surface or a badly warped disc may cause deteriorated sound quality or intermittent playback. Observe the following precautions to ensure high quality sound performance:



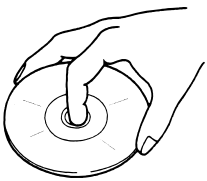
- Do not leave an ejected disc in the disc slot for very long; the disc may warp. Discs should be stored in their cases and kept away from high temperature and humidity.



- Do not stick a piece of paper or tape on, nor write on or scratch either side of a disc.



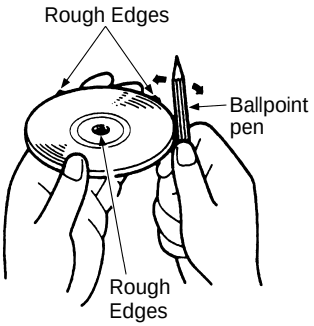
- Discs spin at a high speed inside the deck. Keep cracked or warped discs out of the player to avoid damaging it.

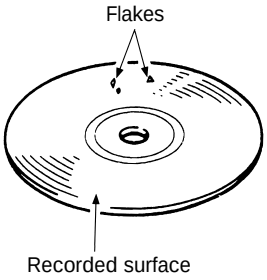


- Avoid touching the recorded surface when handling a disc; handle discs by their edges.

About brand new discs

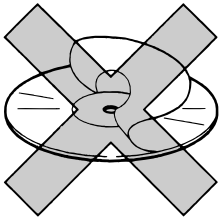
- You may notice that some brand new discs are rough around the center hole or outside edge. Remove the rough edges with the side of a ballpoint pen, etc. Rough edges may prevent proper loading in the deck. Flakes from the rough edges may also stick to the recorded surface and interfere with playback.



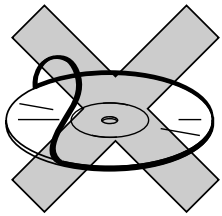


About disc accessories

- Do not use accessories (stabilizers, protective seals, laser lens cleaners, etc.) sold for "improving sound performance" or "protecting discs." The changes in disc thickness or outside dimensions made by these accessories may cause problems in the player.



- Please be sure NOT to attach any ring-shape protector(or other accessory) to your discs. Those protectors are commercially available and said to protect disc and to improve sound quatily(and antivibration effect), but they can do more harm than good in regular uses. The most common problems are Insert /Eject related problems and "No playback" problems due to the protectorring that came off in the disc machanism.

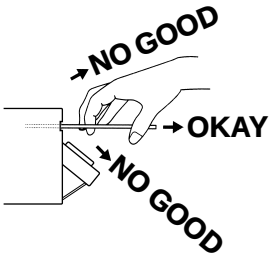


About borrowed discs

- Do not use a disc with glue or remnants of adhesive tape or labels. They may cause the disc to get stuck inside or damage the deck.

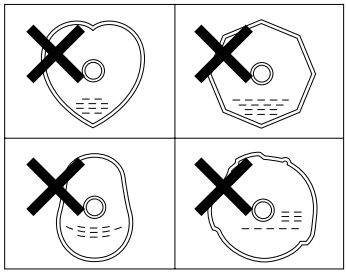
How to remove discs

- When removing the ejected disc, pull it straight out along the slot. Pressing downward in the process may scratch the recorded surface of the disc.



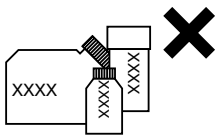
About irregularly-shaped discs

- Specially-shaped discs, like heart-shaped or octagonal discs, cannot be played. Do not attempt to play them, even with an adapter, since they may damage the player.



About cleaning a disc

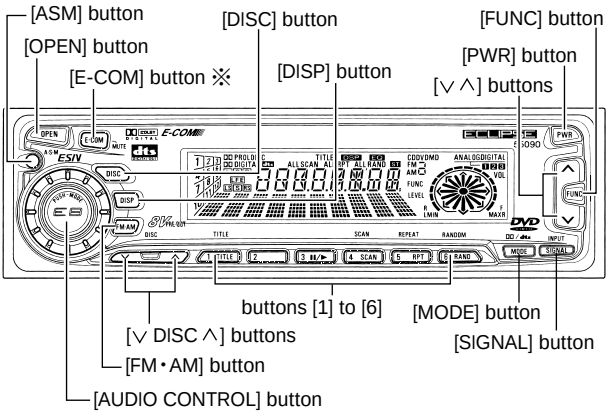
- Use a commercially available compact disc cleaner to clean a disc, wiping lightly from the center to the edge.



- Do not use benzine, thinner, LP record spray or other cleaners on discs. They may damage a discs finish.

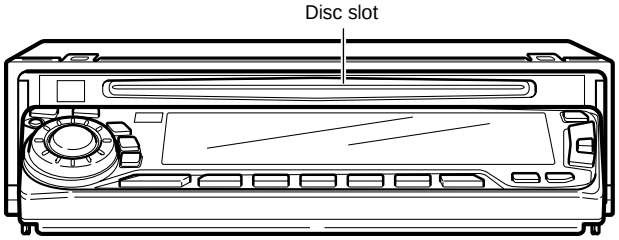
u Names of controls and parts

Front view



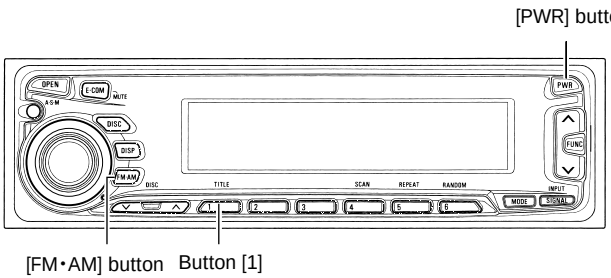
※NOTE:Double function button → "E-COM" & "MUTE" functions

With the front open



l Caution l

- Never place an object or rest your hands or the like on the front panel.
- When inserting or removing CDs and DVDs, be careful not to cause interference with the display or other parts.



u ESN (Key CD) security operating procedure

n How to program the Key CD

1. Turn the vehicle's ignition on. Press the [PWR] button or [FM•AM] button to activate the tuner mode.

The tuner is now turned on.

2. Press and hold button [1], then the [FM•AM] button, and hold both for more than one second.

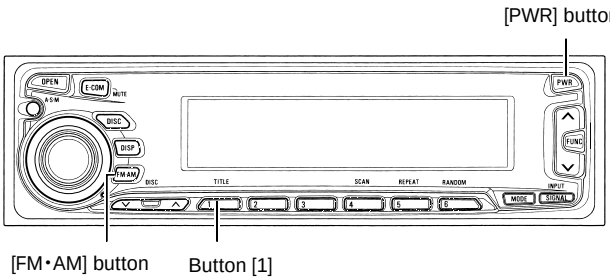
A [SEC] message appears, then in two seconds it will change to [DISC].

The front panel opens; the 55090 is now ready to accept your Key CD in the CD slot.

3. Insert the CD into the slot.

The front panel closes.

A [SEC] message appears, the front panel opens, the Key CD is ejected, then the tuner mode is activated.



ATTENTION

- If there is a problem with the inserted CD, an [ERR] message will appear for two seconds and the CD will be ejected. Reinsert the ejected CD.
- If a CD causes the [ERR] message to appear twice in a row, a [CHANGE] message will appear for two seconds. Try another CD.
- The Security indicator will flash whenever the vehicle's ignition is switched off.

n How to cancel the Key CD

1. Turn the vehicle's ignition on. Press the [PWR] button or [FM•AM] button to activate the tuner mode.

The tuner is now turned on.

2. Press and hold button [1], then the [FM•AM] button, and hold both for more than one second.

A [SEC] message appears, then in two seconds it will change to [DISC].

The front panel opens; the 55090 is now ready to accept your Key CD in the CD slot.

3. Insert your Key CD into the slot.

The front panel closes.

A [CANCEL] message appears, the front panel opens, the Key CD is ejected, then the tuner mode is activated.

The Key CD is cancelled.

- This process cancels the protection for the ESN deck.
- If power to the ESN deck is disconnected, then reconnected, a Key CD will not need to be inserted in order to return the unit to normal operation.
- Inserting a CD other than the Key CD will not cancel the protection. Instead, the display will show [ERR] for two seconds, then the normal CD playback mode will activate.

n How to change the Key CD

1. First, cancel the existing Key CD.
Refer to “How to cancel the Key CD.”

2. Next, program a new Key CD.
Refer to “How to program the Key CD.”

n How to resume normal operation (ESN security lock out)

If power is disconnected while ESN security is active (a Key CD was programmed), operation is disabled until power is restored and the unit unlocked. Follow this procedure to resume normal operation.

1. When the power is turned on after disconnecting the battery power, a [SEC] message will appear for two seconds. Thereafter, the message changes to [DISC] and the 55090 is ready to accept your Key CD into the slot.

2. Insert your Key CD.
   If the correct CD is inserted, an [OK] message will appear for two seconds and the CD will begin playing.

- If an incorrect CD is inserted, an [ERR] message will appear for two seconds, after which the CD will be ejected.
- You must use the same CD used for Key CD programming; a duplicate CD may not work properly.

n What happens if an incorrect CD is inserted?

1. An [ERR] message will be appear, then change to a flashing [DISC], then the CD will be ejected.

You will have five uninterrupted attempts to insert the correct CD.

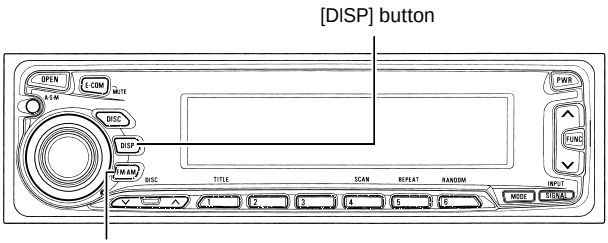
2. After the 5th incorrect attempt, the display reads [CALL800] and the security indicator lights steadily.

- Number of errors: Numbers indicated at _ show the number of errors that occurred.

l Note l

If after 5 tries the correct Key CD is not inserted, the display reads [CALL800]; the unit must be returned to Eclipse to be reset. In this case, please contact your Eclipse dealer for assistance or call Eclipse directly at (800) 233-2216.

Your key CD can be easily forgotten. Write the album name in a reminder note (Pg. 111).



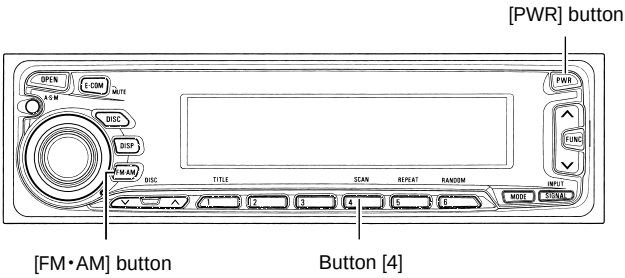
■ How to turn the security indicator on/off

Once ESN security is activated, the indicator flashes whenever the vehicle's ignition is turned off, warning potential thieves that the unit is protected. However, if you do not want this visible deterrent, it may be turned off.

1. With the tuner mode ON, press the [DISP] button, then [FM•AM] button and hold both for more than one second.

2. [IND. FLASH] or [IND. –––––] appears on the display.

[IND. FLASH] means the security indicator will flash when the vehicle's ignition is off, and [IND. –––––] means it will not. Repeat the above steps to reactivate the flash mode.

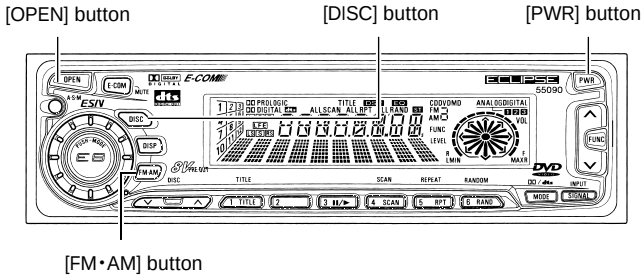


■ How to read the Electronic Serial Number

1. Turn the vehicle's ignition on; press the [PWR] button or [FM•AM] button to activate the tuner mode.

2. Press button [4], then the [FM•AM] button, and hold both for more than one second.

[ESN] appears on the display, followed by an eight-digit number; this number is your electronic serial number (ESN). You may use this number to identify your Eclipse 55090 in the event it is recovered after being stolen.



u Basic operation

This section covers basic operating procedures. For additional details, please refer to the sections on specific functions.

n Turning the power on and off

1 Press the [PWR] button.

Pressing the button turns the power on and off.

Less than two seconds : Stand by

More than two seconds : Off

ATTENTION

- If a car is not eguipped with an ACC position (for example, a European car), keep the [PWR] button depessed for more than two seconds.

  You may also press the [FM•AM] button to turn on the power. (When there is a disc loaded, you may also press the [DISC] button to turn on the power.)

n Playing back discs

1 Press the [OPEN] button.

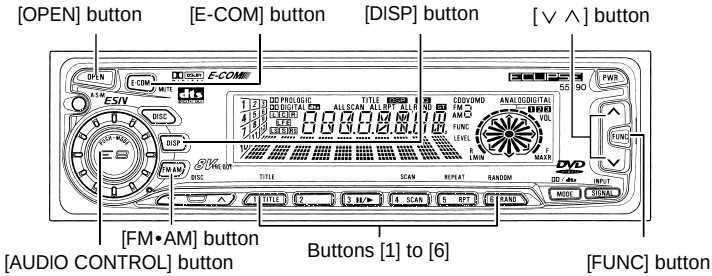
The front panel opens.

2 Insert a disc into the disc slot, label side up.

If the inserted disc is an audio CD, playback will then start. If the disc is a DVD, the pictures will be played back (only when a separate monitor is connected).

ATTENTION

- When a disc is already loaded, pressing the [DISC] button starts playing the disc.



n Listening to the tuner

1 Press the [FM•AM] button.

This will turn the tuner on.

To turn the tuner off, either press the [PWR] button or select another mode.

2 Tap the [FM•AM] button to switch to the desired FM or AM bands.

Each additional tap of the button switches the preset station sets from FM1 to FM2, FM3, then AM in sequence.

3 Press the [∨ ∧] button to tune to a station.

A tap on either the [∨] or [∧] button for less than one second will enable manual station tuning. Hold one button down for more than two seconds to start the automatic station search.

[∧] button: Starts searching toward higher frequencies.

[∨] button: Starts searching toward lower frequencies.

ATTENTION

- If stations have been stored in memory, pressing a button from [1] to [6] will directly select a station. (Refer to the section “Manually setting stations into memory” on page 62.)

n Adjusting the angle of the front panel

You can adjust the angle of the display to suit your personal preference.

1. Press and hold the [OPEN] button for more than one second.

The front panel will open while the button is being pressed, and it will stop at the point where the button is released.

The front panel will stop automatically once it reaches its maximum angle of adjustment.

- After the angle has been adjusted, the front panel will then open fully if the [OPEN] button is pressed for less than one second, and will close fully if the [OPEN] button is pressed again for more than one second.

n Adjusting audio volume

1. Turn the [AUDIO CONTROL] button to the left or right.

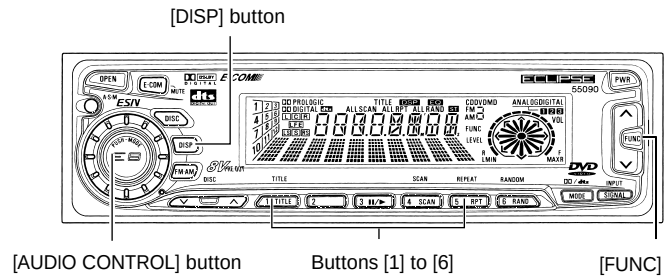
Turn to the left : Decreases the volume.

Turn to the right : Increases the volume.

- Press and hold the [E-COM] button for more than two seconds to activate or cancel MUTE function.

⚠ Warning

Do not adjust the volume or other controls while driving the vehicle. Do so only while parked in a safe location.



n Displaying the clock

1. Press the [DISP] button repeatedly until the time is displayed.
   Refer to the section on "Setting the clock" to set the time display.

n Others

t Disabling the guide tone feature (for button operation)

The receiver is set at the factory to emit a beep tone in response to button operation. The guide tone feature may be disabled in the following procedure:

1. Press and release the [FUNC] button.
2. Press and hold button [6] until the [BEEP OFF] display appears on the screen.
   Pressing the button will switch modes between the [BEEP ON] and the [BEEP OFF].
3. Press the [FUNC] button again.

t Setting the clock

This receiver uses the 12-hour A.M. / P.M. display notation.

1. Press the [DISP] button repeatedly to switch to the clock adjustment mode.
2. To adjust the hour, press either button [1] or [2] while holding the [DISP] button down.
   Button [1]: Turns the hour back.
   Button [2]: Turns the hour forward.

3 . To adjust the minutes, press either button [3] or [4] while holding the [DISP] button down.

Button [3]: Turns the minute back.

Button [4]: Turns the minute forward.

- To set the clock to 0 minutes, 0 seconds (an exact hour), press button [5], holding down the [DISP] button.

For example:

At 3:29: Pressing button [5] returns to 3:00.

At 3:30: Pressing button [5] advances to 4:00.

t Switching audio control modes

Various audio control modes may be fine-tuned using this procedure.

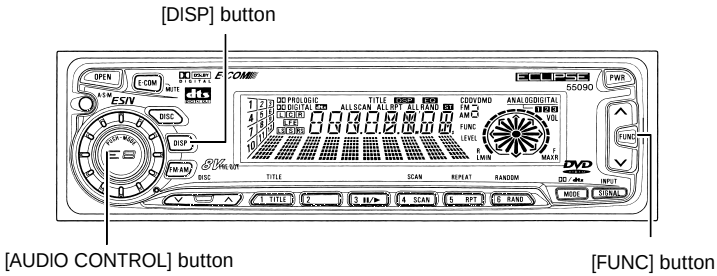
1 . Press the [AUDIO CONTROL] button for less than one second.

Pressing the button repeatedly will allow you to control adjustments of [BASS] (low frequencies), [MID] (middle frequencies), [TREB] (high frequencies), [FAD] (front-rear speaker balance), [BAL] (left-right speaker balance), and [SUB-W] (subwoofer level).

2 . Turn the [AUDIO CONTROL] button to the left or right

It controls levels and adjust the sound to your preference.

- When Tone Control Cancel feature is on, adjustment of BASS, MID, and TREB will be skipped.
- Adjustment of BASS, MID, and TREB is set by each mode such as CD, tuner.
- If a digital surround unit (sold separately) has been connected, the mode switches from Volume DSP level adjustment BASS MID TREBLE Center level Rear level Fader Balance SUB-W in that order.



t Enabling the loudness control

The loudness control may be turned on to emphasize low and high frequencies at low volume levels.

Loudness compensates for the apparent weakness of low and high frequencies at low volume by boosting the bass and treble levels.

1. Press and hold the [AUDIO CONTROL] button until the [LOUD ON] display appears on the screen.

ATTENTION

•To disable the loudness feature, repeat the above procedure to display the [LOUD OFF] indication.

t Switching the display

1 . Press the [DISP] button for less than one second.

Changes the mode as follows.

Tuner/DVD Mode	the spectrum analyzer mode→the clock
CDP Mode	the title→CD text→the spectrum analyzer mode→the clock

t Turning the display ON and OFF

1 . Press the [FUNC] button.

2 . Press the [DISP] button.

The display setting will change as follows each time the button is pressed.

→ Full display → Partial display → Off →

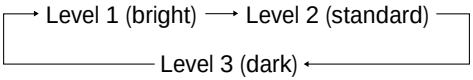
t Changing the display luminance

The luminance level of the display can be changed by the following procedure to one of three levels.

1 . Press the [FUNC] button.

2 . Press and hold the [DISP] button for more than one second.

The luminance level will change as follows each time the button is pressed.



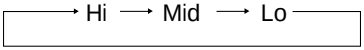
3 . Press the [FUNC] button.

Function mode will then be cleared.

t Changing the spectrum analyzer's sensitivity

1 . Press the [DISP] button for more than one second while displaying spectrum-analyzer mode.

Each press of the button changes the sensitivity of the spectrum analyzer.



t Changing the eye contact analyzer display

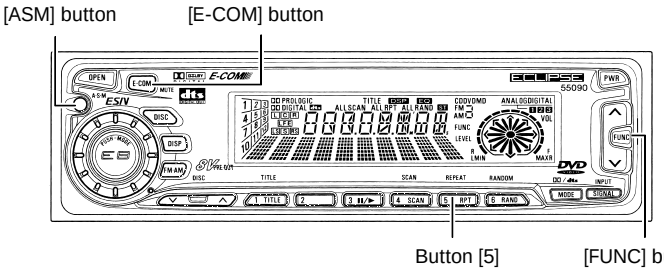
The eye contact analyzer display lets you check the state of the sound field using your eyes.

1 . Set the display mode to any mode except spectral analyzer mode.

2 . Press and hold the [DISP] button (for 1 second or more).

The indicator to the right of the display will change each time the button is pressed.

The setting will change to two types of display pattern or no display.



t Switching Non-Fader modes

1 . Press the [FUNC] button.

2 . Press button [5] to switch the phase.

3 . Press the [FUNC] button.

Pressing the button will cancel Function mode.

t Disabling the Tone Control Cancel feature

1 . Press the [FUNC] button.

2 . Press the [ASM] button to switch on or off.

3 . Press the [FUNC] button.

Pressing the button will cancel Function mode.

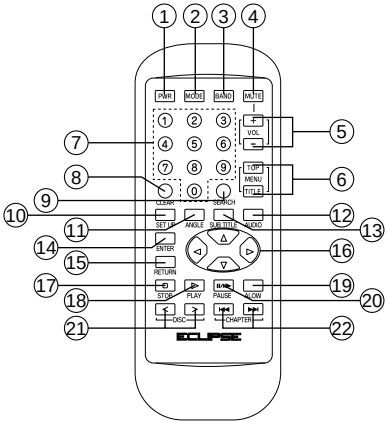
t Enabling E-COM feature

1 . Press the [E-COM] button for one second.

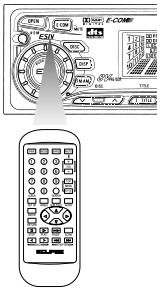
Pressing the button will switch the E-COM feature on or off.

u How to operate the DVD player

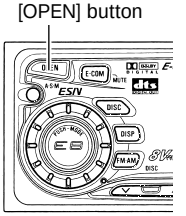
When this player is connected to a monitor, you can view DVD pictures on the monitor screen.
DVD operations should basically be carried out using the special remote control.
However, if the description of operation tells you to "Press the ... button on the player", then you should use the button on the main player unit instead. (The remote control cannot be used for these operations.)
In addition, if a ⃠ appears on the screen during an operation, it means that the player or the disc has caused the operation to be canceled, and so that operation cannot be carried out.

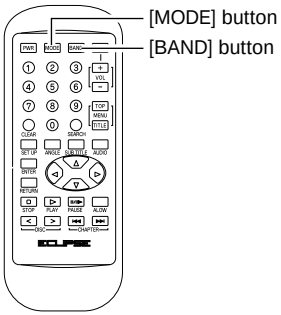


Remote-control light receptor



① [PWR] button
② [MODE] button
③ [BAND] button
④ [MUTE] button
⑤ [VOL] buttons
⑥ [MENU] buttons
⑦ Numeric input buttons
⑧ [CLEAR] button
⑨ [SEARCH] button
⑩ [SET UP] button
⑪ [ANGLE] button
⑫ [SUB TITLE] button
⑬ [AUDIO] button
⑭ [ENTER] button
⑮ [RETURN] button
⑯ Cursor buttons
⑰ [STOP] button
⑱ [PLAY] button
⑲ [PAUSE] button
⑳ [SLOW] button
㉑ [DISC] buttons
㉒ [CHAPTER] buttons





n Inserting a DVD

1. Press the [OPEN] button on the player.

The front panel opens.

2. Insert the DVD disc into the disc slot, label side up.

If the disc is double-sided, insert the disc so that the side to be played is facing downward.

The DVD pictures will then be played back.

n Changing to DVD mode

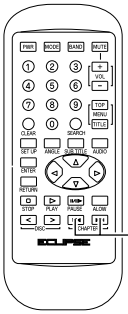
1. Press the [MODE] button to change to disc mode.

The mode changes between tuner and disc modes each time the button is pressed.

2. Press the [BAND] button to change to DVD mode.

When a CD changer is connected, press the [BAND] button to change modes from DVD (CD) player CD changer 1 CD changer 2.

The indicator will skip a changer or player that has no discs loaded in it.



n Fast-forwarding and rewinding pictures

1. Press the [CHAPTER] buttons.

The mode changes between tuner and disc modes

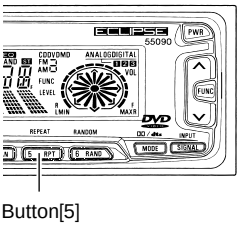
[>] : When pressed and released immediately, the picture moves to the next chapter.
When pressed and held (for one second or more), the pictures are fast-forwarded.

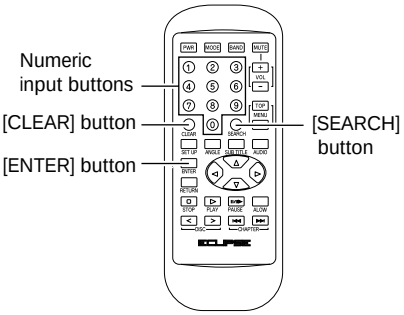
[<] : When pressed and released immediately, the picture moves to the beginning of the current chapter.
When pressed and held (for one second or more), the pictures are rewound.

ATTENTION

- The contents of DVDs are separated into large sections called titles, and small sub-sections called chapters. Numbers are assigned to each of the titles and chapters, and these numbers can be used to search within the contents of the disc.

Title 1		Title 2			Title 3	
Chapter 1	Chapter 2	Chapter 1	Chapter 2	Chapter 3	Chapter 1	Chapter 2





n Searching for pictures

1. Press the [SEARCH] button.

The mode changes to Chapter Search Title Search Search Mode Cancel each time the button is pressed.

2. Use the numeric input buttons on the remote control to enter the number for the picture you would like to search for, and then press the [ENTER] button.

The pictures for the number which was entered will then start playing back.

ATTENTION

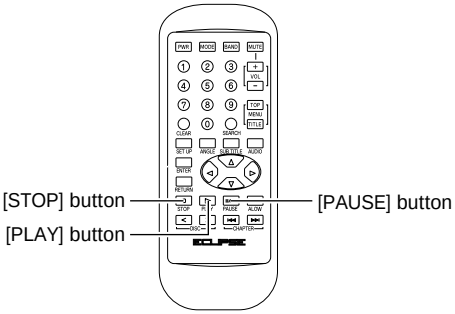
•If you make a mistake when entering the number, you can press the [CLEAR] button to clear the entry.

n Repeat playback (REPEAT)

1. Press the [5] button on the player.

If pressed and released immediately (within one second), the chapter will be repeated, and if pressed and held (for one second or more), the title will be repeated.

If this button is pressed once more, repeat mode will be cleared.



n Pausing the picture/Frame-by-frame playback

1. Press the [PAUSE] button.

   The picture playback will pause.

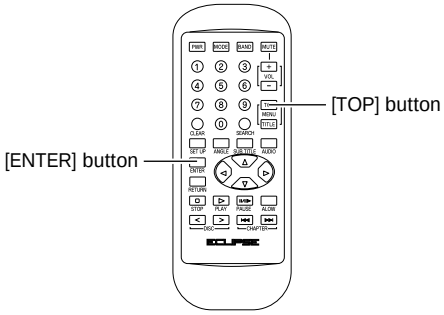
   If you press the [PAUSE] button while the picture is paused, the picture will play back one frame at a time.

   To return to normal playback, press the [▶ (PLAY)] button.

n Stopping playback

1. Press the [STOP] button.

   If you then press the [▶ (PLAY)] button, playback will resume from the point where it was stopped.



n Displaying DVD menus

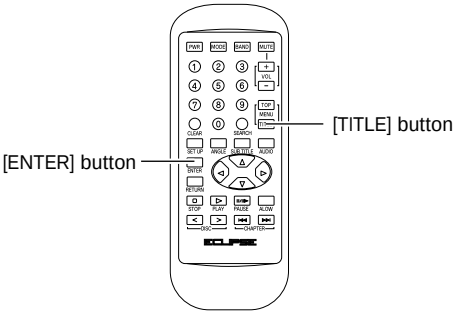
If the [TOP] button is pressed during DVD-Video playback, the menu which is recorded on the DVD disc can be displayed on the screen (if using a DVD disc which has a menu recorded).

1. Press the [TOP] button.
The DVD menu will turn on and off each time the button is pressed.

2. Use the cursor buttons to select an item, and then press the [ENTER] button.

ATTENTION

- If a button is pressed while the DVD menu screen is being displayed, playback will restart from the point immediately prior to when the menu was displayed.



n Displaying title menus

If the [TITLE] button is pressed during DVD-Video playback, the title menu which is recorded on the DVD disc can be displayed on the screen (if using a DVD disc which has a title menu recorded).

1. Press the [TITLE] button.

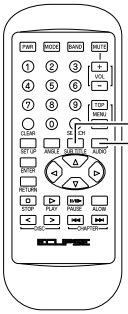
The title menu will turn on and off each time the button is pressed.

[TITLE MENU ON (OFF)] will appear in the display.

2. Use the cursor buttons to select an item, and then press the [ENTER] button.

ATTENTION

- If a button is pressed while the title menu screen is being displayed, playback will restart from the point immediately prior to when the menu was displayed.



n Selecting different multiplex audio channels

If the [AUDIO] button is pressed during DVD-Video playback, the audio channel languages which are recorded on the DVD disc can be displayed on the screen (if using a DVD disc which has multiplex audio channels recorded).

1. Press the [AUDIO] button.

The multiplex audio channel changes each time the button is pressed.

AUDIO ∗/∗ ENGLISH

∗/∗ □□□□□
- Current language
- Total number of available audio channels
- Current audio channel number

n Selecting different subtitle languages

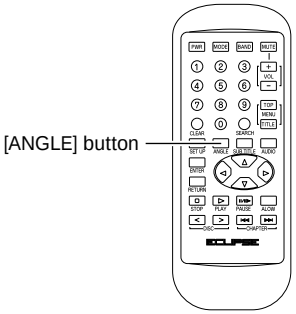
If the [SUB TITLE] button is pressed during DVD-Video playback, the subtitle languages which are recorded on the DVD disc can be displayed on the screen (if using a DVD disc which has different subtitle languages recorded).

1. Press the [SUB TITLE] button.

The subtitle language changes each time the button is pressed.

SUBTITLE ∗/∗ ENGLISH

∗/∗ □□□□□
- Current subtitle language
- Total number of available subtitle languages
- Current subtitle language number



n Selecting different multiplex angles

If the [ANGLE] button is pressed during DVD-Video playback, the multiplex angles which are recorded on the DVD disc can be displayed on the screen (if using a DVD disc which has different multiplex angles recorded).

1. Press the [ANGLE] button.

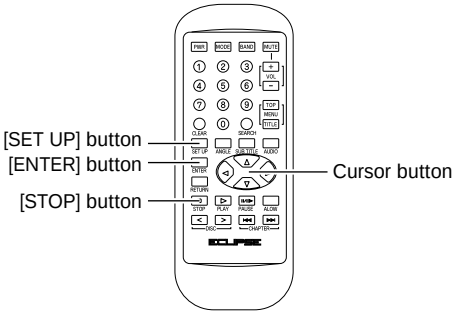
The multiplex angle changes each time the button is pressed.

ANGLE ∗/∗

∗/∗
- Total number of available angles
- Current angle number

ATTENTION

- If a ⃠ appears on the screen during an operation, it means that the player or the disc has caused the operation to be canceled.
- If the multiple angle indicator is set to ON in DVD setting mode (refer to page 42), will appear when a picture which can have the angle setting changed is being displayed.



n Initial DVD settings

When a DVD is being played back, press the [STOP] button on the remote control to stop playback.

1. Press the [SET UP] button.

The player will change to DVD setting mode.
The following operations should be carried out after setting the player to DVD mode.

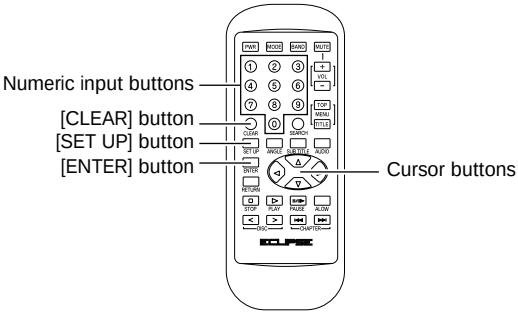
t Language setting

This sets the languages to be used for audio tracks, subtitles and menu displays.

1. Use the [▲] and [▼] cursor buttons on the remote control to select AUDIO, SUBTITLE or MENU LANGUAGE, and then press the [ENTER] button.
2. Use the [▲] and [▼] cursor buttons on the remote control to select the language, and then press the [ENTER] button. The selected language will be displayed.

ATTENTION

- If you select "OTHER", use the numeric input keys on the remote control to enter the code number for the desired language, while referring to the table of language codes on page 50.



3 . Press the [SET UP] button.
DVD setting mode will be cleared.

ATTENTION

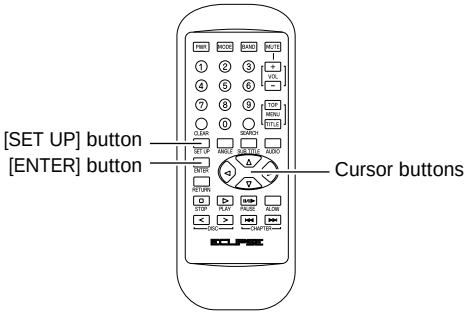
- You cannot select languages which have not been recorded on the disc.
- If there is no menu recorded on the disc, no menu display will appear.

t Display size setting

1 . Use the ▲ and ▼ cursor buttons on the remote control to select TV SCREEN, and then press the [ENTER] button.

2 . Use the ▲ and ▼ cursor buttons on the remote control to select the display size, and then press the [ENTER] button. The screen display will change to the size selected.

3 . Press the [SET UP] button.
DVD setting mode will be cleared.



t Parental lock setting

1. Use the [▲] and [▼] cursor buttons on the remote control to select PARENTAL LOCK, and then press the [ENTER] button.
2. Use the numeric input buttons on the remote control to enter a password.

   After entering the password, press the [ENTER] button. The password is initially set to "0000". To change the password, enter "0000" and press the [ENTER] button. Then select PARENTAL LOCK CHANGE and enter the new password.

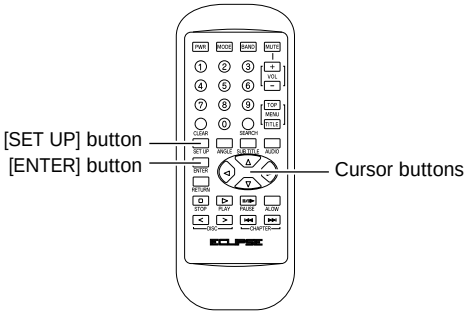
   If you forget the password, press the [RESET] button on the player (refer to page 93) to reset the password to "0000".

ATTENTION

- Press the [CLEAR] button to clear the numbers which you have entered.
- Once a password number has been entered, you will need to use this number in order to change the parental lock settings from then on.

3. Use the cursor buttons on the remote control to select the audio-visual restriction level (1~8), and then press the [ENTER] button.

   The audio-visual restriction level selected will be displayed.



ATTENTION

- The audio-visual restriction levels are classified as follows.

Level 1:	Restricts playback to DVD programs for young children
Levels 2~7:	Restricts playback to DVD programs for children and general audiences
Level 8:	Allows any type of DVD program to be played back

4 . Press the [SET UP] button.
DVD setting mode will be cleared.

t Multiplex angle indicator display

1 . Use the [▲] and [▼] cursor buttons on the remote control to select ANGLE INDICATOR, and then press the [ENTER] button.

2 . Use the [▲] and [▼] cursor buttons on the remote control to select ON or OFF, and then press the [ENTER] button. The selected setting will be displayed.

3 . Press the [SET UP] button.
DVD setting mode will be cleared.

Discs which are compatible with this player

- This player can be used to play the following types of disc. Refer to page 10 for further details.

Type of disc	Disc contents	Size of disc
DVD video discs Region No.	Audio + video (moving pictures)	12cm / 8cm
Audio CDs	Audio	12cm / 8 cm (single)

- DVD video discs include region numbers (numbers for regions where the disc can be played back) which are different for each country. The region number (number for regions where the disc can be played back) is set to "1" or "ALL" on this player. Check the region number for the disc you are using before playing it.

Notes on DVD

- This player is compatible with the NTSC color television format. It cannot play back discs which are recorded in other formats (such as PAL and SECAM).
- This player has been designed to block the playback of some DVD video discs which have been obtained outside the proper retail region, and also some commercial-use discs, so be sure to check the region number (number for regions where the disc can be played back) which appears on the disc to be played back.
- Some pirated discs may not comply with the required specifications. Such discs cannot be played back.
- When playing DVD video discs, the player can play audio tracks which are in linear PCM, MPEG and Dolby Digital format. The 39011 digital surround unit (sold separately) is require in order to play back signals in DTS format.

  Other decoding formats are not supported.

  If using a source with this player which is not a 2-channel source, all signals will be output as down-mixed signals.

  In order to play sources such as 5.1-channel sources in their proper format (such as 5.1 channel), the 39011 digital surround unit (sold separately) is required.

Region numbers for DVDs which are compatible with this player

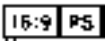
DVDs are provided with a region number such as [1]. The number which is displayed corresponds to the region number for DVD players which can be used to play back that disc. If the number displayed does not include a [1], or if the display is not [ALL], then such DVDs cannot be played back using this player. Furthermore, DVDs with no number indication are also subject to region restrictions, and so they may also not be compatible with this player.

Notes on operations when playing DVDs

The conditions under which DVDs are to be played back are determined by the intentions of the DVD manufacturer and the content creator. In order to reproduce the DVD content in the way which was intended by the content creator, some of the functions of this player may not operate correctly for some discs. Be sure to read the instructions which are provided with the disc.

Symbols used on DVD video discs

This player is equipped with a variety of functions for enjoying DVDs. Check the function symbols which are included in the DVD programming in order to get the maximum enjoyment from the DVD.

Meanings and examples	Functions
Indicates the region number (number for regions where the disc can be played back).	This player can be used to play back DVDs with a region number of "ALL" or "1".
Indicates the image aspect ratios (ratio between width and height of the TV screen) which can be selected for viewing the pictures recorded on the DVD. 	You can select the screen size to match the type of TV (HDTV or 4:3 TV) which is connected to the player. •Pictures are recorded in 4:3 format. •Pictures are recorded so that they can be viewed in wide format for high-definition TVs, and in letterbox size for 4:3 TVs. •Pictures are recorded so that they can be viewed in wide format for high-definition TVs, and with the left and right edges truncated for 4:3 TVs.
Indicates the types of subtitles available. 1: English subtitles 2: Japanese subtitles	Use the [SUB TITLE] button on the remote control to select the preferred language.
Indicates the number of angles (such as pictures taken from a front view and pictures taken from a rear view) which are recorded on the DVD video disc.	Indicates the number of audio tracks.
Use the [AUDIO] button on the remote control to select the desired audio track from the track which are recorded on the DVD video disc.	•Use the [AUDIO] button on the remote control to select the desired audio track from the track which are recorded on the DVD video disc. •The audio tracks recorded on the disc vary depending on the disc. Refer to the instructions which are provided with the disc for details.

About copyright

- The copying, broadcasting, projection, cable transmission, public presentation and rental (whether for payment or not) of DVD video discs and their contents are forbidden by law.
- This player is manufactured under license from Dolby Laboratories Licensing Corporation.
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  "DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

Explanation of DVD video terms

DVD video

A DVD which has moving pictures recorded on it. DVD video utilizes MPEG2, which is one of the global standards in digital compression technology, to compress the video data by 1/40th (on average) of its original size.

In addition, it also incorporates variable rate encoding technology which allows the data volume to be changed in accordance with the shape of the picture.

Audio data can be recorded in Dolby Digital format in addition to PCM format in order to provide a greater ambience for the sound.

A number of additional functions such as multiplex angle and subtitling are also available to further enhance listening and viewing enjoyment.

Parental lock (audio-visual restriction level)

This is a DVD video function which limits the ability to play back the disc in accordance with restriction levels determined on an individual country basis. The limits applied vary depending on the type of DVD video, so that the disc may be completely unplayable, or scenes with excessive violence, for example, may be cut or other scene may be inserted in their place automatically during playback.

Titles

These are the larger of the units which are used to divide the pictures and audio tracks which are recorded on DVD video discs into sections. Normally it corresponds to a single movie for video program, and a single album (or a single track) for audio programs. The numbers which are assigned sequentially to each title are called "title numbers". The contents of the disc can be played back by selecting title numbers.

Chapters

These are the smaller of the units which are used to divide the pictures and audio tracks which are recorded on DVD video discs into sections. A single title may consist of several chapters, and the numbers which are assigned sequentially to each chapter are called "chapter numbers". If chapter numbers have been recorded on the disc, they can be used for chapter search operations to skip quickly to a desired section.

Multiplex angle

This is one of the features of DVD video discs. The same scene is shot from different angles, and these angles are all recorded onto a single disc, so that you can change the angle when viewing the pictures.

Subtitles (multiplex audio)

More than one audio track or subtitle track in different languages can be recorded for a single sequence of pictures, and you can select whichever language you prefer.

Region number (number for regions where the disc can be played back)

DVD players and DVD discs normally include numbers that indicate the regions where the discs can be played back (known as "region numbers"). If the number assigned to a disc is not included in the region numbers which have been programmed into the DVD player, then that disc cannot be played back on that DVD player. Refer to page 45 for further details on region numbers.

Dolby Digital (5.1 ch) / Dolby Surround (Prologic)

These terms refer to three-dimensional sound effect technology developed by Dolby Corporation. By connecting a digital surround unit (sold separately) which is compatible with Dolby Digital (5.1 ch), you can enjoy sound which is closer in feel to a movie theater.

DTS

This is a digital audio system designed for theaters which was developed by Digital Theater Systems, Inc. DTS is one of the alternative systems to Dolby Digital. It uses six audio channels to provide accurate sound field orientation and more realistic sound effects.

The features of DTS cannot be obtained unless a digital surround unit (sold separately) is connected.

MPEG

This is an abbreviation for Moving Picture Experts Group, and is an international standard for video compression. Some DVDs use this format for digital compression of audio tracks also.

Linear PCM

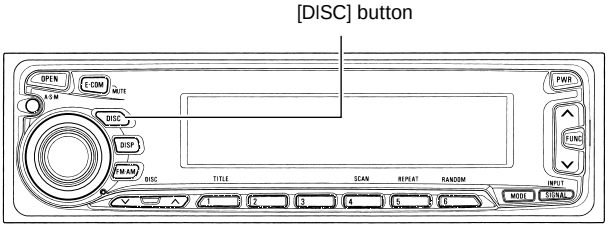
PCM is an abbreviation for Pulse Code Modulation, and refers to a form of digital audio. CDs and DVDs use PCM for their digital audio tracks.

Table of language codes

These codes are used to specify the language for audio tracks, subtitles and on-screen menu displays.

Language	Input code	Language	Input code
Japanese	1 0 0 1	Estonian	0 5 2 0
English	0 5 1 4	Basque	0 5 2 1
French	0 6 1 8	Persian	0 6 0 1
German	0 4 0 5	Finnish	0 6 0 9
Italian	0 9 2 0	Fiji	0 6 1 0
Spanish	0 5 1 9	Faroese	0 6 1 5
Dutch	1 4 1 2	Frisian	0 6 2 5
Russian	1 8 2 1	Irish	0 7 0 1
Chinese	2 6 0 8	Scots- Gaelic	0 7 0 4
Korean	1 1 1 5	Galician	0 7 1 2
Greek	0 5 1 2	Guarani	0 7 1 4
Afar	0 1 0 1	Gujarati	0 7 2 1
Abkhazian	0 1 0 2	Hausa	0 8 0 1
Afrikaans	0 1 0 6	Hindi	0 8 0 9
Amharic	0 1 1 3	Croatian	0 8 1 8
Arabic	0 1 1 8	Hungarian	0 8 2 1
Assamese	0 1 1 9	Armenian	0 8 2 5
Aymara	0 1 2 5	Interlingua	0 9 0 1
Azerbaijani	0 1 2 6	Interlingue	0 9 0 5
Bashkir	0 2 0 1	Inupiak	0 9 1 1
Byelorussian	0 2 0 5	Indonesian	0 9 1 4
Bulgarian	0 2 0 7	Icelandic	0 9 1 9
Bihari	0 2 0 8	Hebrew	0 9 2 3
Bislama	0 2 0 9	Yiddish	1 0 0 9
Bengali	0 2 1 4	Javanese	1 0 2 3
Tibetan	0 2 1 5	Georgian	1 1 0 1
Breton	0 2 1 8	Kazakh	1 1 1 1
Catalan	0 3 0 1	Greenlandic	1 1 1 2
Corsican	0 3 1 5	Cambodian	1 1 1 3
Czech	0 3 1 9	Kannada	1 1 1 4
Welsh	0 3 2 5	Kashmiri	1 1 1 9
Danish	0 4 0 1	Kurdish	1 1 2 1
Bhutani	0 4 2 6	Kirghiz	1 1 2 5
Esperanto	0 5 1 5	Latin	1 2 0 1

Language	Input code	Language	Input code
Lingala	1 2 1 4	Slovak	1 9 1 1
Laothian	1 2 1 5	Slovenian	1 9 1 2
Lithuanian	1 2 2 0	Samoan	1 9 1 3
Latvian	1 2 2 2	Shona	1 9 1 4
Malagasy	1 3 0 7	Somali	1 9 1 5
Maori	1 3 0 9	Albanian	1 9 1 7
Macedonian	1 3 1 1	Serbian	1 9 1 8
Malayalam	1 3 1 2	Siswati	1 9 1 9
Mongolian	1 3 1 4	Sesotho	1 9 2 0
Moldavian	1 3 1 5	Sundanese	1 9 2 1
Marathi	1 3 1 8	Swedish	1 9 2 2
Malay	1 3 1 9	Swahili	1 9 2 3
Maltese	1 3 2 0	Tamil	2 0 0 1
Burmese	1 3 2 5	Telugu	2 0 0 5
Nauru	1 4 0 1	Tajik	2 0 0 7
Nepali	1 4 0 5	Thai	2 0 0 8
Norwegian	1 4 1 5	Tigrinya	2 0 0 9
Occitan	1 5 0 3	Turkmen	2 0 1 1
Oromo	1 5 1 3	Tagalog	2 0 1 2
Oriya	1 5 1 8	Setswana	2 0 1 4
Panjabi	1 6 0 1	Tonga	2 0 1 5
Polish	1 6 1 2	Turkish	2 0 1 8
Pashto	1 6 1 9	Tsonga	2 0 1 9
Portuguese	1 6 2 0	Tatar	2 0 2 0
Quechua	1 7 2 1	Twi	2 0 2 3
Rhaeto-Romance	1 8 1 3	Ukrainian	2 1 1 1
Kirundi	1 8 1 4	Urdu	2 1 1 8
Romanian	1 8 1 5	Uzbek	2 1 2 6
Kinyarwanda	1 8 2 3	Vietnamese	2 2 0 9
Sanskrit	1 9 0 1	Volapuk	2 2 1 5
Sindhi	1 9 0 4	Wolof	2 3 1 5
Sangho	1 9 0 7	Xhosa	2 4 0 8
Serbo-Croatian	1 9 0 8	Yoruba	2 5 1 5
Sinhalese	1 9 0 9	Zulu	2 6 2 1



u How to operate the CD player

First press the [DISC] button to switch to the disc mode. It is assumed here that a CD has already been loaded into the unit.

n Listening to CDs

1. Press the [DISC] button.

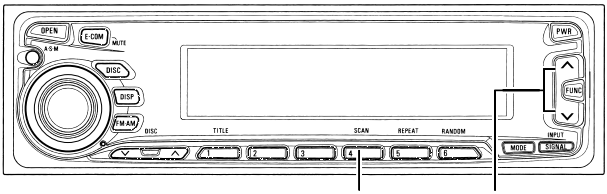
This turns on the disc mode and starts CD play.

If an external CD changer is connected, each additional tap of the button will switch modes from DVD(CD) player CD changer 1 CD changer 2.

A changer or player with no discs loaded will be skipped.

l Caution l

- Playback may be intermittent when there is a scratch on a CD or when the recorded side is dirty.
- Only two external CD changers may be connected.



n Advancing to the next track or returning to the beginning of the track being played

1. Press the [∨ ∧] button.

[∧] button: Advances to the next track.

[∨] button: Returns to the beginning of the track being played.

ATTENTION

- Pressing and holding the [∧] button will fast-forward through a track, while pressing the [∨] button will fast-reverse.

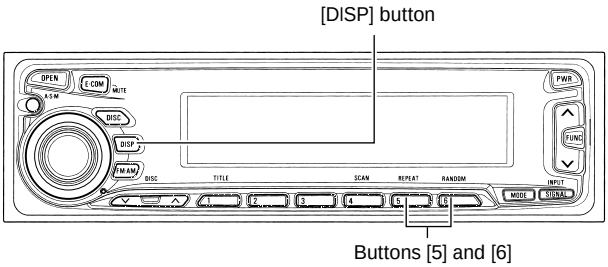
n Playing the beginning of tracks (SCAN)

1. Press button [4 (SCAN)].

Tapping the button causes the player to move up to the next track and play it for 10 seconds, then move up to the next track and play it for 10 seconds, and so on until the button is tapped again.

ATTENTION

- To continue playing a desired track, press the button again to stop scanning.



n Repeating the same track (REPEAT)

1. Press button [5 (RPT)] to repeat the track being played.
   To cancel, press button [5] again.

n Playing tracks in random order (RANDOM)

1. Press button [6 (RAND)] to play the tracks in random order.
   To cancel, press button [6] again.

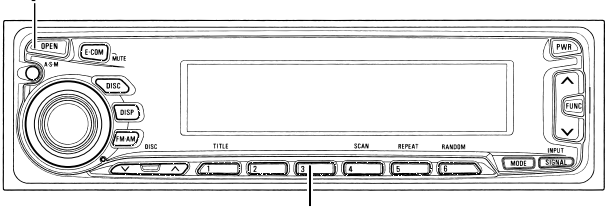
ATTENTION

- Occasionally the same track happens to be played (selected) two or more times in a row; this is normal operation and is no sign of a problem.

n Switching the display

1. Press the [DISP] button for less than one second.
   Each press of the button switches the display from the title CD text the spectrum analyzer mode the clock.

[OPEN] button



Button [3]

n Switching a CD to pause / play

1 Push button [3(❚❚/►)].

It pauses playing a CD.

To cancel, press button [3] again.

n Ejecting the disc

1 Press the [OPEN] button.

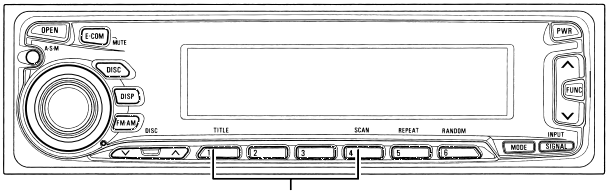
The front panel opens and the disc ejects.

2 Remove the disc and press the [OPEN] button.

The front panel closes.

l Caution l

- If the front panel is closed while the ejected disc is still in the slot, the disc may get scratched. Be sure to close the front panel after removing the disc.
- Do not drive with the front panel open. The panel may cause unexpected personal injury during a panic stop, or the like.
- Do not attempt to close the front panel by hand. Doing so may damage the panel.



Buttons [1] to [4]

n Creating a title for a CD

A CD title may be created, attached and displayed for your discs. If external CD changers are connected, a title for a CD will be created in the same way. It is assumed here that the CD to be titled is playing.

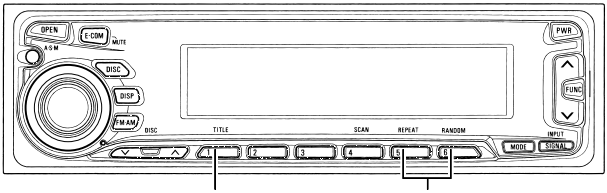
1 . Press button [1 (TITLE)].
The disc title creation mode starts.

2 . Press button [2] to select the character type.
Pressing the button will switch types from [ABC, 123] (upper-case and alphanumeric characters) to [abc, 123] (lower-case and alphanumeric characters) and then to [!&?] (symbols).

3 . Press either [3] or [4] to select the position in which to enter the character.
The character will be inserted where the cursor is flashing:

Button [3]: Moves the cursor to the left.

Button [4]: Advances the cursor to the right.



Button [1] Buttons [5] and [6]

4 . Press either button [5] or [6] to select characters.

Button [5]: Moves the character backward in its type.
Button [6]: Advances the character forward in its type.

[Upper-case characters, alphanumeric characters] Initial value [Up direction]
→A→B→C→···X→Y→Z→1→2→3→···8→9→0→

[Lower-case characters, alphanumeric characters] Initial value [Up direction]
→a→b→c→···x→y→z→1→2→3→···8→9→0→

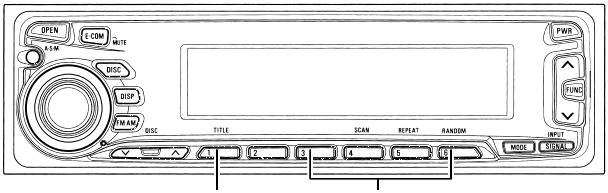
[Symbol] Initial value [Up direction]
→! →" →# →$ →% →& → →(→) →* →+ →, →— →. →/ →: →; →< →= →> →? →@ →« →_→

ATTENTION

- To change the type of character to be entered, repeat steps 2 and 3.
- A maximum of 10 characters may be entered per title.
- A maximum of 30 titles may be stored.

5 . Press button [1].

The CD title is now memorized.



Button [1] Buttons [3] to [6]

n Changing a previously set title

If external CD changers are connected, a previously set title for a CD will be changed in the same way. It is assumed here that the CD mode is selected.

1 . Press button [1 (TITLE)].
The CD title setting mode starts, and all titles are displayed.

2 . Press either of button [3] or [4] to move the cursor to the position in the title for inserting or changing characters.
Button [3]: Moves the cursor to the left.
Button [4]: Advances the cursor to the right.

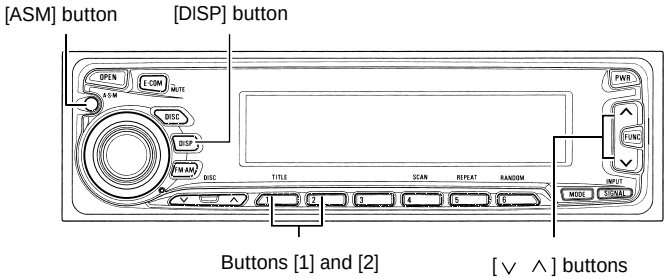
3 . Press either button [5] or [6] to make changes in the character that is flashing.
Button [5] : Moves the character backward in its type.
Button [6] : Advances the character in its type.

ATTENTION

To leave a space blank, follow these steps.

1. Select and flash the space to be blank.
2. Press button [6] to make a blank space flashing.
3. Press button [4] to move.

4 . Press button [1].
The CD title entry process is now completed.



n Deleting a previously created title

If external CD changers are connected, a previously created title for a CD will be deleted in the same way. It is assumed here that the CD mode is selected.

1 . Hold button [1 (TITLE)] down for more than two seconds.
The title-deleting mode starts.

2 . Press either the [∨ ∧] button.
Use these buttons to select the title to be deleted.

3 . Hold the [ASM] button down for more than two seconds.
The title has now been deleted.
To cancel the mode, press button [1 (ESC)].

n Displaying CD text

If a CD has a logo shown below, it is recorded a Disc title and track titles, and they can be displayed.

COMPACT disc DIGITAL AUDIO TEXT

1 . Push the [DISP] button for less than one second until CD text is shown.

2 . Press button [2].
Each press switches showing Disc title or track titles.