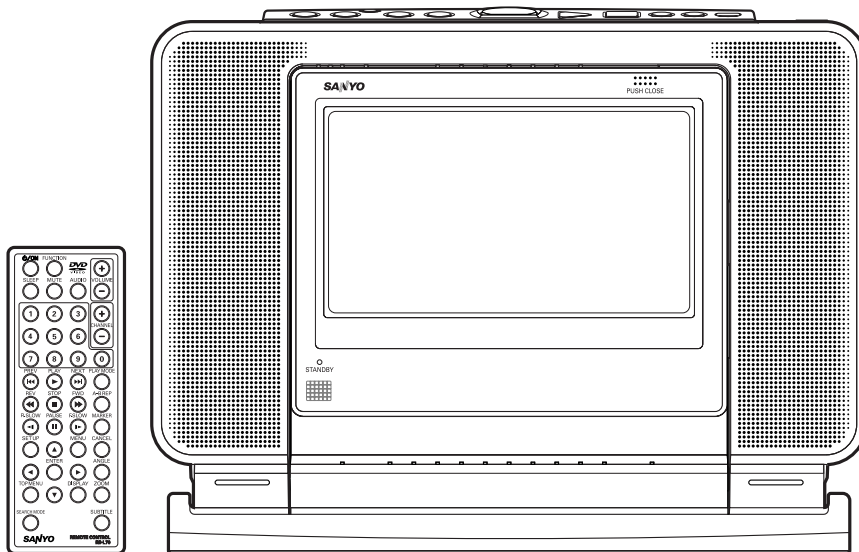


INSTRUCTION MANUAL

DVD-L70

PORTABLE LCD TV/DVD PLAYER



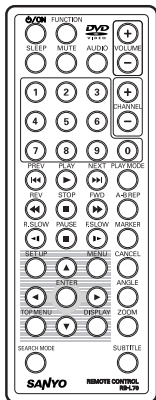
Please Read This Manual.

Because DVD is a new technology, we recommend that you read this manual carefully before connecting your PORTABLE LCD TV/DVD PLAYER and operating it for the first time. Keep the manual in a safe place for future reference.

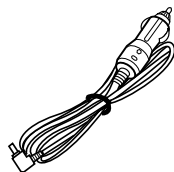
CONTENTS

CONTENTS	E2	SETTING OSD LANGUAGE	E30
ACCESSORIES	E2	SETTING LANGUAGE	E31
SAFETY PRECAUTIONS	E3	SETTING THE ASPECT RATIO OF TV	
IMPORTANT SAFETY INSTRUCTIONS	E4	SCREEN	E32
PRECAUTIONS	E6	SETTING ON SCREEN DISPLAY/STATUS	
CONTROLS	E7	DISPLAY OF DISC	E33
REMOTE CONTROL	E9	SETTING "JPEG INTERVAL"/	
ON SCREEN DISPLAY	E11	SETTING "SELECT FILES"	E34
POWER SUPPLIES	E12	DYNAMIC RANGE CONTROL	E35
DISC	E14	PARENTAL CONTROL SETTING	E36
PLAYBACK PROCEDURE	E15	TEMPORARY DISABLING OF RATING	
SPECIAL PLAYBACK	E17	LEVEL BY DVD DISC	E37
MP3/WMA CD OPERATION	E18	SETTING THE CHILD LOCK	E38
KODAK PICTURE CD PLAYBACK	E19	ANTENNA CONNECTIONS	E39
JPEG CD PLAYBACK	E21	CATV CONNECTIONS	E40
PICTURE ZOOM/LOCATING DESIRED SCENE ...	E23	SETTING THE LANGUAGE	E41
MARKING DESIRED SCENES	E24	TO MEMORIZE CHANNELS	E42
REPEAT PLAYBACK	E25	TV OPERATION	E45
RANDOM PLAYBACK/PROGRAM		PICTURE CONTROL ADJUSTMENT	E48
PLAYBACK	E26	SETTING THE ASPECT RATIO OF TV	
TITLE SELECTION/DVD MENU/		SCREEN	E49
CHANGING ANGLES	E27	LANGUAGE CODE LIST	E50
SUBTITLES/CHANGING SOUNDTRACK		CONNECTIONS TO OTHER EQUIPMENTS ...	E51
LANGUAGE	E28	TROUBLE SHOOTING GUIDE	E53
OTHER SOUNDTRACK SETTINGS	E29	SPECIFICATIONS	E55

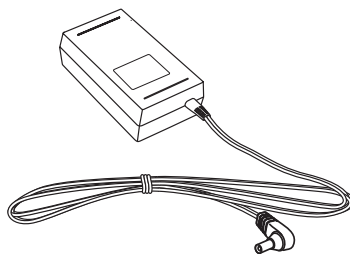
ACCESSORIES



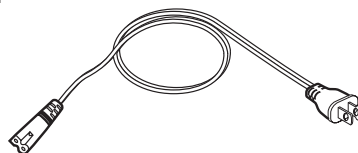
Remote control.....1
(with a CR2025 battery)



Cigarette lighter
adaptor.....1



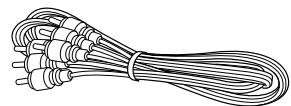
AC adaptor.....1



AC code.....1



Antenna plug.....1



Audio/Video cable.....1

SAFETY PRECAUTIONS



WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN



WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.

NOTE TO CABLE/TV INSTALLER: This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

CAUTION:

This main unit employs a Laser System.

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference should the unit require maintenance, contact an authorized service location.

Use of controls, adjustments, or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION: The apparatus should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.

FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

REGULATORY INFORMATION: FCC Part 15

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a residential installation. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTES ON COPYRIGHTS:

It is forbidden by law to copy, broadcast, show, broadcast via cable, play in public, or rent copyrighted material without permission.

This product features the copy protection function developed by Macrovision. Copy protection signals are recorded on some discs. When recording and playing the pictures of these discs on a VCR, picture noise will appear. 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 technology 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.

Important Information:

TV, DVD, Audio CD, MP3 CD or WMA CD materials are not same Audio output level. You must adjust the volume level individually.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THIS OWNER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use, and servicing.

This unit does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

1. Read These Instructions

All the safety and operating instructions should be read before the product is operated.

2. Follow All Instructions

All operating and use instructions should be followed.

3. Keep These Instructions

The safety and operating instructions should be retained for future reference.

4. Heed All Warnings

All warnings on the product and in the operating instructions should be adhered to.

5. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

6. Grounding or Polarization

Do not defeat the safety purpose of the polarized plug. A plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

7. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

8. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

9. Water and Moisture

Do not use this product near water – for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

10. Cleaning

Unplug this product from the wall outlet before cleaning.

Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

11. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

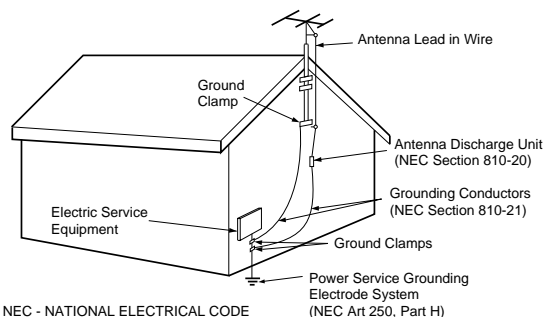
12. Overloading

Do not overload wall outlets, extension cords, or integral convenience receptacles, this can result in a risk of fire or electric shock.

13. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS



14. Lightning

Unplug this apparatus during lightning storms or when unused for long periods of time. This will prevent damage to the product due to lightning and power-line surges.

15. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

16. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

Never spill liquid of any kind on the product.

17. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

18. Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table.

The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.



19. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. If the power-supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the product.
- c. If the product has been exposed to rain or water.
- d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e. If the product has been dropped or the cabinet has been damaged.
- f. If the product exhibits a distinct change in performance.

20. Servicing

Do not attempt to service this product yourself as opening or removing the cover may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

21. Replacement parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Disc Tray

Keep your fingers well clear of the disc tray as it is closing.

It can cause personal injury.

24. Burden

Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.

25. Connecting

When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.

26. Sound Volume

Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.

27. Sound Distortion

Do not allow the product to output distorted sound for a longtime. It may cause speaker overheating and fire.

28. Earphone

When you use the earphone, keep the volume at a moderate level. If you use the earphone continuously with high volume sound, it may cause hearing damage.

29. Laser Beam

Do not look into the opening of the disc tray or ventilation opening of the product to see the source of the laser beam. It may cause sight damage.

30. Disc

Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.

Never watch the DVD playback or TV picture, or try to adjust settings while driving!

Doing so creates the danger of traffic accident. Before operating the unit, be sure to stop the vehicle or boat in a safe area.

How to handle the LCD panel

- Do not press hard or jolt the LCD panel. It may cause the LCD panel glass to break and injury may occur.
- If the LCD panel is broken, make absolutely sure that you do not touch the liquid in the panel. This may cause skin inflammation.
If the liquid gets in your mouth, immediately gargle and consult with your doctor. Also, if the liquid gets in your eyes or touches your skin, consult with your doctor after rinsing for at least 15 minutes or longer in clean water.

PRECAUTIONS

To Obtain a Clear Picture

As a guideline, check every 1,000 hours.

The main unit is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality will be poor.

Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)

For details, please contact your nearest dealer.

Notes on Moisture Condensation

Do not use the unit when moisture condensation may occur. If you use the unit in such a situation, it may damage discs and internal parts.

Moisture condensation occurs during the following cases.

- When you bring the unit directly from a cold place to a warm place.
- When you use the unit in a room where you just turned on the heater, or a place where the cold wind from the air conditioner directly hits the unit.
- When you use the unit in a hot and humid place just after you move the unit from an air conditioned room.
- When you use the unit in a humid place.

What is moisture condensation?

When a cold liquid is poured into a glass, for example, water vapor in the air will condense on the surface of the glass. This is called moisture condensation.

When moisture might condense on the unit...

- 1 Connect the power cord of the unit to the wall outlet.
- 2 If the disc is in the unit remove the disc using [OPEN DISC].
- 3 Press [⏻/ON] to turn on the unit.
- 4 With the power ON, wait 1 ~ 2 hours before using.

When moisture might condense on the unit...

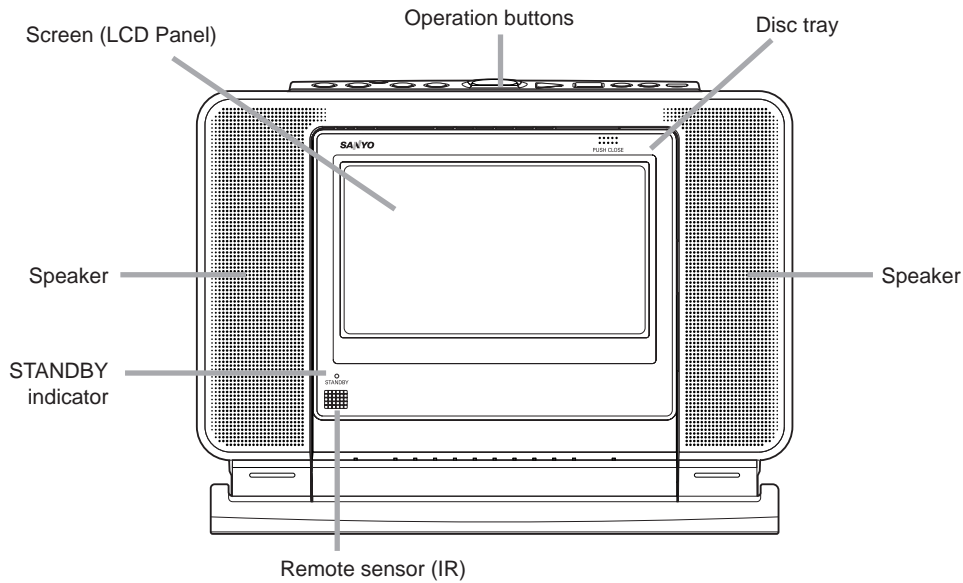
Wait for about 2 hours, and start using after the disc has reached room temperature.

Handling, Storing and Cleaning Discs

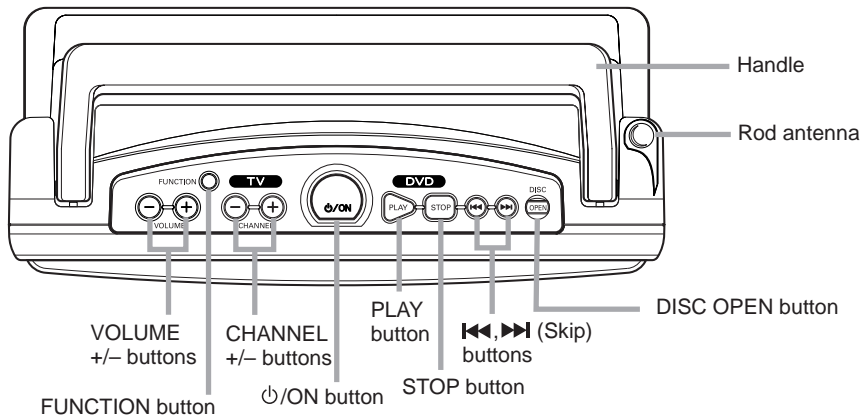
- Fingerprints and dust should be carefully wiped from the signal surface of the disc (glossy side) with a soft cloth. Wipe in a straight motion from the center to the outside of the disc.
- Never use chemicals such as record cleaning sprays, antistatic sprays or fluids, benzene or thinner to clean the discs. These chemicals will permanently damage the plastic surface of the disc.
- 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.
- Discs should be returned to their cases after use to protect them from dust and scratches.
- To prevent warping the disc, do not expose it to direct sunlight, high humidity or high temperatures for extended periods of time.
- Do not apply paper or write anything on either side of the disc. Sharp writing instruments, or the inks used in some felt-tip pens, may damage the surfaces of the disc.

CONTROLS

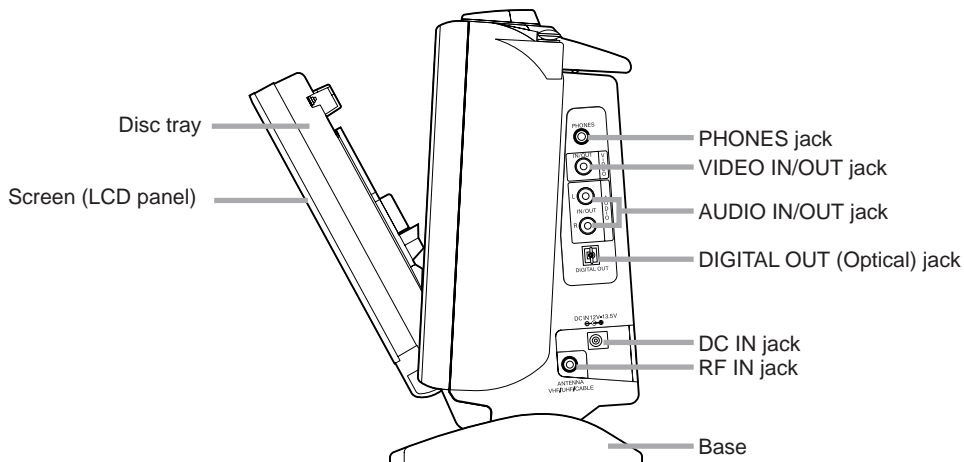
Front



Top

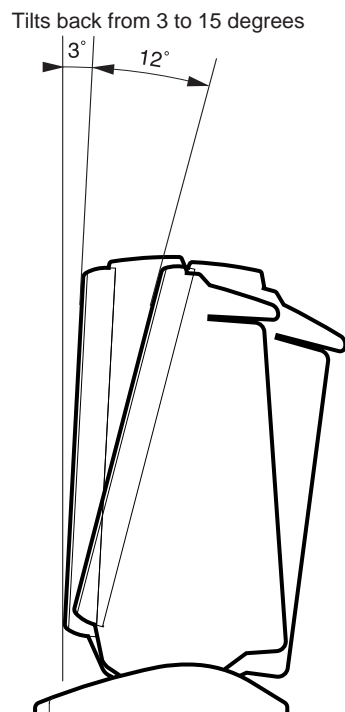


Side



Adjusting the Angle of the Base

You can change the angle of the base for this unit. The part that adjusts is difficult to move in order to support the unit. Make sure to hold the unit firmly and adjust the angle.

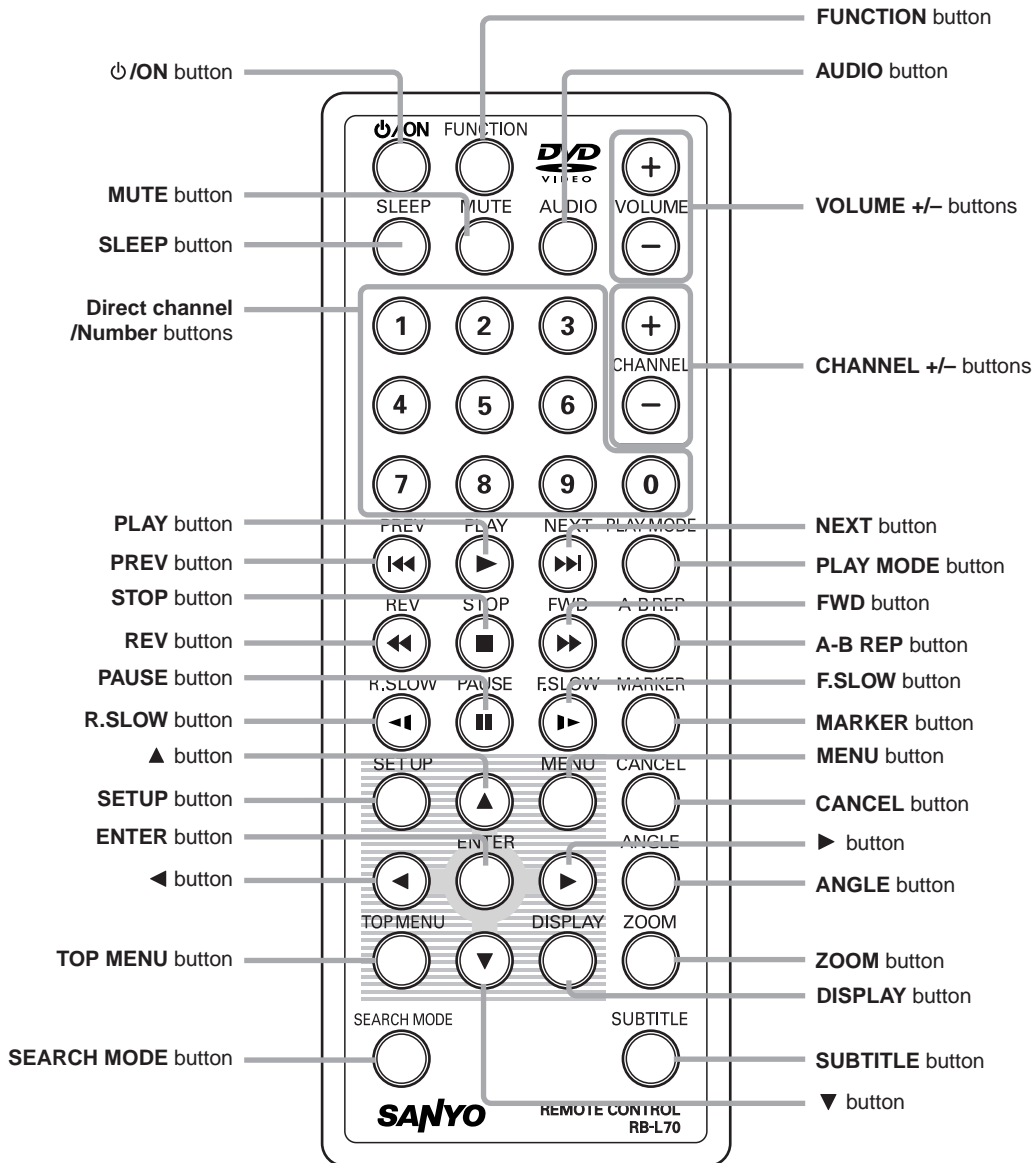


Notes:

- Be careful not to pinch your finger(s) between the main unit and the base when adjusting the angle for the base.
- Do not apply force to the base beyond its adjustable range. This may cause damage.
- Be careful not to apply force on the LCD screen when adjusting the angle.

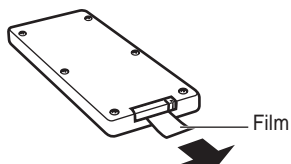
REMOTE CONTROL

Controls



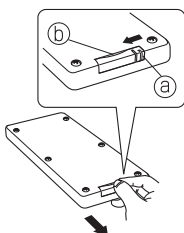
Before Using the Remote Control

Before using the remote control for the first time, pull out the film from the bottom of the remote control.

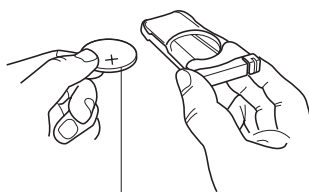


To Replace the Battery

- 1 Removing the battery holder**
Hook your fingernail on ① and ② as in the diagram below, and pull the battery holder out while pressing ③ in the direction indicated by the arrow.

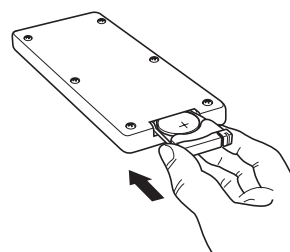


- 2 Inserting the battery**
Remove the old battery, and insert a new battery in the battery holder with the + side up.



Lithium Battery (CR2025)

- 3 Inserting the battery holder**
Install the battery holder in the direction indicated by the arrow.



- Under normal usage, the battery will last from 6 months to a year. However, the attached battery is for confirming operation of the remote, so the battery life could be shorter. If it becomes difficult to operate, please replace the battery.

How to handle batteries

If you misuse the battery, it may leak, get hot or burst so make sure to do the following.



Warning !



Caution!

- Keep batteries out of the reach of children.
- If a battery is swallowed, consult with a doctor immediately.
- Do not heat, dismantle or throw a battery in a fire.
- Do not short out a battery.
- Insert as indicated by the (+) sign.
- Do not use a battery other than the one specified.
- Remove the battery when it is used up.
- Remove the battery if you won't be using the unit for a while.

If liquid leaks out of the battery...

- Wipe off the liquid well.
- If the liquid touches your skin or clothes, wash off with plenty of water.

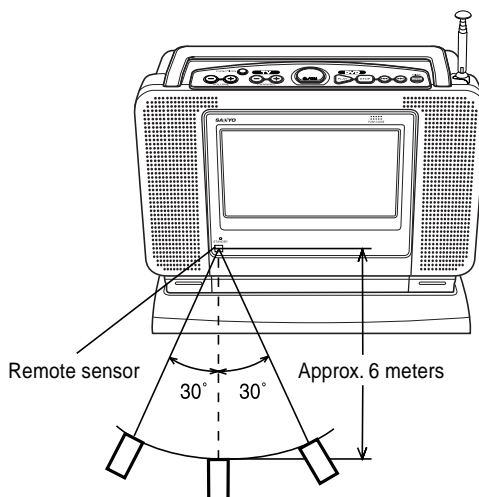
IMPORTANT NOTE:

SPENT OR DISCHARGED BATTERIES MUST BE RECYCLED OR DISPOSED OF PROPERLY IN COMPLIANCE WITH ALL APPLICABLE LAWS.

FOR DETAILED INFORMATION, CONTACT YOUR LOCAL COUNTY SOLID WASTE AUTHORITY.

Operation of your remote control

Operate the remote control within 30° angle on either side of the remote sensor, up to a distance of approx. 6 meters.



To make your remote control work properly...

Your remote control may not function properly or fail to work at all in the following circumstances.

- If there is an obstruction between the remote and the main unit.
- If direct sunlight or a strong light shines on the remote sensor.

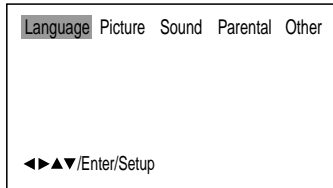
ON SCREEN DISPLAY

Selecting items on the menu screen, you can set or switch various functions.

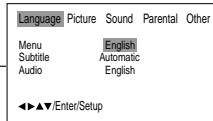
DVD Menu

You can set in the DVD mode when the disc is stopped or resumed.

On Screen Display

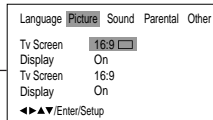


Language



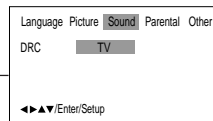
- Setting the Menu language E31
- Setting the Subtitle language E31
- Setting the Audio language E31

Picture



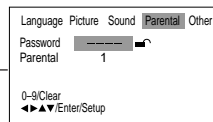
- Setting the aspect ratio of TV screen E32
- Setting on screen display E33
- Setting the JPEG Interval E34
- Setting the Select Files E34

Sound



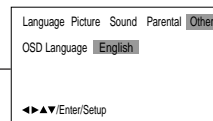
- Setting the DRC E35
(Dynamic Range Control)

Parental



- Setting the password E36
- Setting the parental control E36

Other

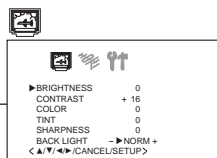
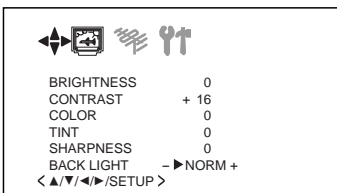


- Setting OSD Language E30

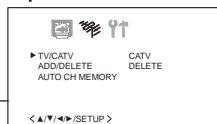
TV Menu

You can set in the TV/External input/DVD (when playing back) mode. Some setting will not be displayed depending on your using situation.

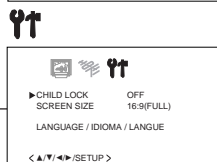
On Screen Display



- Picture control adjustment E48



- TV/CATV selection E42
- To add/delete channels E44
- Automatic memory tuning E43



- Setting the child lock E38
- Setting the aspect ratio of TV screen E49
- Setting the language E41

How to operate

Preparation: Press [ON] to turn on the unit.

[FUNCTION] Press when switching the operation mode (TV/External input/DVD).

[SETUP] Press when displaying or closing the menu screen.

[▲],[▼],[◀],[▶] Press when selecting the item on the menu screen, and selecting each setting.

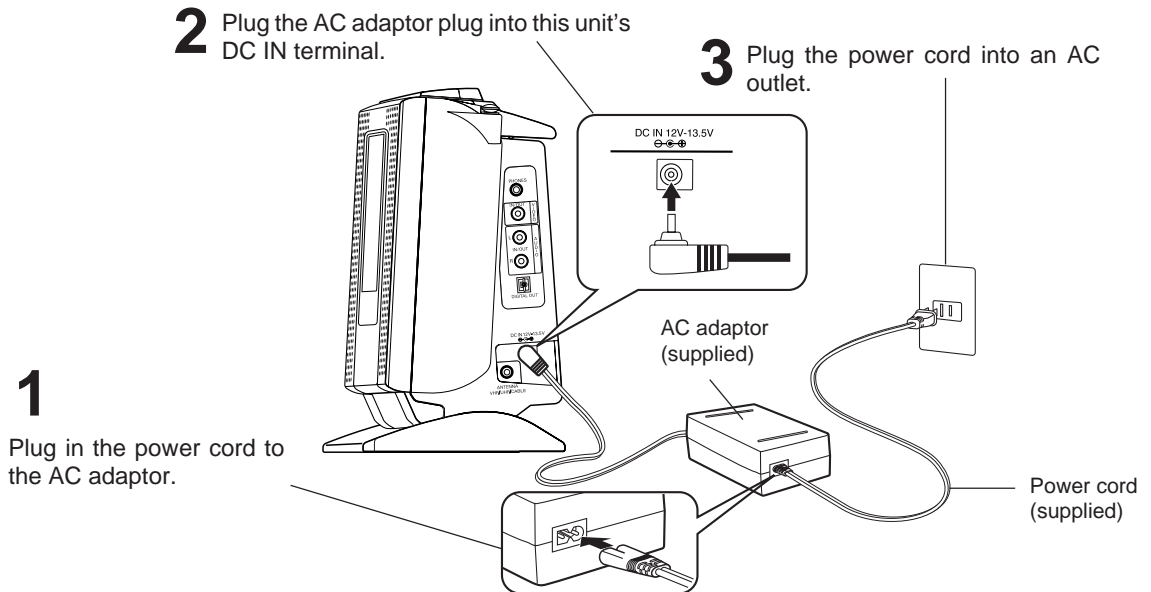
Number buttons [0-9] .. Press when you wish to enter the desired number.

[ENTER] Press when determining (memory) each item.

Power Supplies

Using AC Adaptor

Connect to a power outlet with the supplied AC adaptor and power cord.



Note:

Please make sure to insert the plug of each cord securely.



Warning!

- DO NOT CONNECT THIS UNIT TO THE POWER USING ANY DEVICE OTHER THAN THE SUPPLIED AC ADAPTOR OR POWER CORD. THIS COULD CAUSE FIRE, ELECTRICAL SHOCK, OR DAMAGE.
- DO NOT USE WITH A VOLTAGE OTHER THAN THE POWER VOLTAGE DISPLAYED. THIS COULD CAUSE FIRE, ELECTRICAL SHOCK, OR DAMAGE.



Caution!

- DO NOT USE THIS WITH THE AC ADAPTOR COVERED WITH CLOTH, ETC., OR PRESSED INTO A NARROW AREA. THIS RESULTS IN POOR DISSIPATION OF HEAT AND MAY CAUSE FIRE, ELECTRICAL SHOCK, OR DAMAGE.
- WHEN YOU DON'T USE THIS UNIT FOR A LONG TIME, SUCH WHEN AWAY ON A TRIP, IN THE INTEREST OF SAFETY, BE SURE TO UNPLUG THE PLUG FROM THE AC OUTLET.
- DO NOT PLUG/UNPLUG THE PLUG WHEN YOUR HANDS ARE WET. THIS MAY CAUSE ELECTRICAL SHOCK.

This is not a malfunction

During use the AC adaptor becomes warm, however, this is not a malfunction.

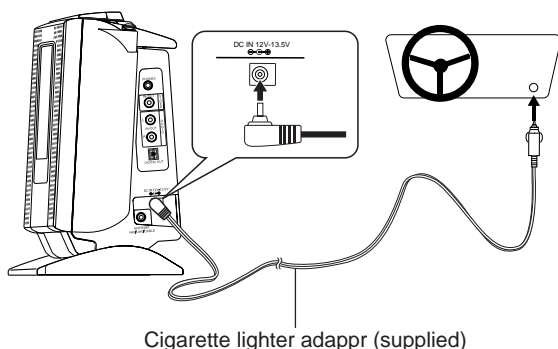
CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS POLARIZED PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

If you need to replace the supplied AC adaptor or power cord, the specified one is requested. In this case, please contact a Sanyo Authorized Service Station.

- The supplied cigarette lighter adaptor is designed for use with vehicles or boats that have a 12V, negative ground electrical system.
- Most vehicles or boats have this type of electrical system, but if you are unsure about the type your vehicle or boat has, contact the vehicle or the boat dealer.

Using Cigarette Lighter Adaptor

Plug one end of the cigarette lighter adaptor into the DC IN 12V-13.5V jack, then plug the other end into the cigarette lighter socket.



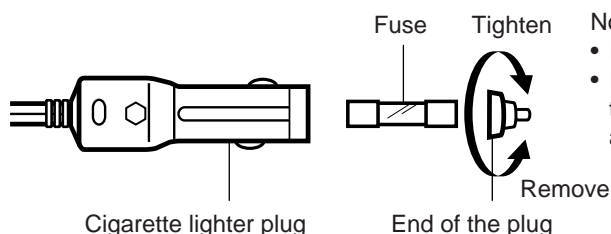
Caution on the cigarette lighter adaptor:

- Use this unit only with the supplied cigarette lighter adaptor. Use with other cigarette lighter adaptors could damage the unit.
- When the inside of the cigarette lighter socket is dirty with ashes or dust, the plug section may become hot due to poor contact. Be sure to clean the cigarette lighter socket before use.
- After use, disconnect the cigarette lighter adaptor plugs from both this unit and the cigarette lighter socket.
- The cigarette lighter adaptor may cause interference with reception from the car radio or another radio inside the vehicle or the boat. If this is the case, disconnect the cigarette lighter adaptor from the cigarette lighter socket, or use the radio at a distance from the cigarette lighter adaptor.

Fuse Replacement

When the cigarette lighter adaptor does not operate, check to see if the fuse has blown. If the fuse has blown, try to determine the cause, then replace the fuse according to the following procedure.

1. Disconnect the cigarette lighter plug from the cigarette lighter socket.
2. Turn the end portion of the plug and remove.
3. Remove the blown fuse.
4. Put in a new 8A fuse.
5. Turn the end portion of the plug and tighten.



Notes:

- Replace the fuse with one of the same rating.
- If the fuse blows again after replacement, contact the store where you purchased the unit, or contact a Sanyo Authorized Service Station.

Traffic safety:





- Do not use while operating a motorized vehicle or boat. It may create a traffic hazard and is illegal in many areas.
- You should use extreme caution or temporarily discontinue use in potentially hazardous situations.

CAUTION:



The unit's cabinet may warp or the unit may otherwise be damaged if it is placed in direct sunlight, near heaters or in cars with the windows closed.

Playable Discs

This unit can play DVD videos, Audio CDs, CD-R and CD-RW. The symbol indicating the type of disc is on the label or the jacket.

	DVD/*DVD video discs	Audio CDs	CD-R/CD-RW
Disc Mark			 
Contents	Audio + Video (moving pictures)	CD-DA file	MP3/WMA/JPEG file
Disc Size/ Maximum playback time	12 cm/Approx. 4 hours (single sided disc) 12 cm/Approx. 8 hours (double sided disc)	12 cm/Approx. 74 minutes	12 cm/Depending on the recording conditions
	*8 cm/Approx. 80 minutes (single sided disc) *8 cm/Approx. 160 minutes (double sided disc)	*8 cm/Approx. 20 minutes	*8 cm/Depending on the recording conditions
	*When playing back the 8 cm disc, you need an adaptor sold separately. You may not be able to playback depending on the type of adaptor and how it is mounted.		

- * Although DVD-R discs that have been recorded in the video mode can be played back, there are times when a disc cannot be played back, depending on how it was recorded.
- Discs apart from the CDs above, such as video CDs, photo CDs, DVD-RAM, DVD-RW disc cannot be played.
- Some CD-R/RW discs may be incompatible.
- This unit uses the NTSC color system, and cannot play DVD video discs recorded in any other color system (PAL, SECAM, etc.).

The region number of this unit is 1. If region numbers, which stand for their playable area, are printed on your DVD video disc and you do not find  or , disc playback will not be allowed by the player.



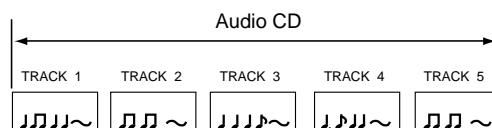
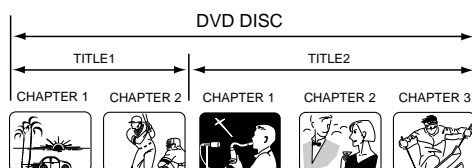
Notes in Playing CDs

Please use discs that have the CD logo,  on the disc's label.

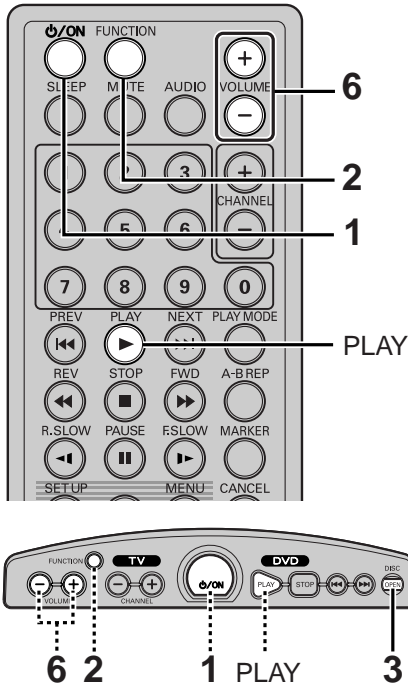
- We cannot guarantee sound quality or playback if you use a disc that does not comply with CD standards, such as a copy-controlled discs, specially shaped discs, etc.
- We cannot guarantee playback in the CD playback function if you use CDs that do not meet CD standards, such as those with Copy Guard, etc. When playing a CD, please check that it has the CD logo symbol and read the notes on the package to be sure that the disc complies with CD standards. If you have difficulty in playing CDs only with CDs that do not comply with CD standards, we would ask you to contact the retailer of those discs for detailed information.

Structure of Disc Contents

Normally, DVD video discs are divided into titles, and the titles are sub-divided into chapters. Audio CDs are divided into tracks. Each title, chapter or track is assigned a number, which is called "title number", "chapter number" or "track number" respectively.



PLAYBACK PROCEDURE



Notes:

- If a non-compatible disc is loaded, "Incorrect Disc", "Region Code Error" or "Parental Error" will appear on the TV screen according to the type of loaded disc. In this case, check your disc again (see page E14 and E36).
- Some discs may take a minute or so to start playback.
- When you set a single-faced disc label downwards (ie. the wrong way up) and press [DISC OPEN] or [PLAY], "Reading" will appear and remain on the screen for approx. 1 minute and then it will change to "Incorrect Disc".
- Some playback operations of DVDs may be intentionally fixed by software producers. Since this unit plays DVDs according to the disc contents the software producers designed, some playback features may not be available. Also refer to the instructions supplied with the DVDs.
- A menu screen may appear on the TV screen, if the disc has a menu feature. In this case, press [▲], [▼], [◀], [▶], [ENTER] or [PLAY] to operate a menu feature. (The menu screen may not be displayed, depending on the disc's specifications.)

Important Note:

"👤" may appear on the TV screen during operation. This icon means that the function is not available on the disc now.

- 1 Press [⏻/ON].
The power comes on with the TV screen displayed. The STANDBY indicator turns off.
 - Every time you turn on the power, it goes to TV mode and the TV screen is displayed.

- 2 Press [FUNCTION] on the unit or on the remote control to select the DVD mode.
Each time you press the button, the screen will change as follows.

TV mode → External Input mode → DVD mode → TV mode...

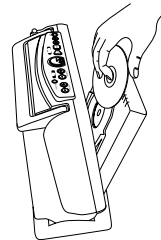
Once you select the DVD mode, "SANYO" is displayed on the screen.

- It may take a few moments when switching from an external input mode to the DVD mode.

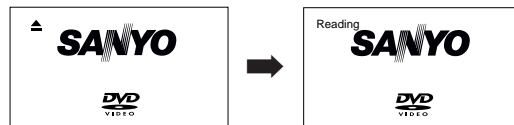
- 3 Press [DISC OPEN] to open the disc tray on the unit and pull the tray toward you.
After pressing the button to open the disc, and after the symbol "▲" stops flashing on the screen, the disc tray will open a bit, so open the disc tray further towards you.



- 4 Place a disc onto the tray.
Hold the disc, position it with the printed label side up, align it with the guides, and place it in its proper position.

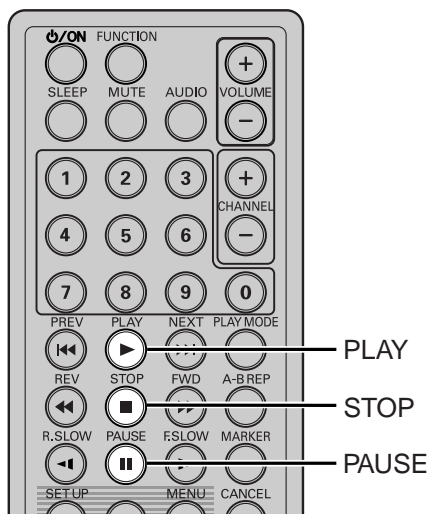


- 5 Push the disc tray to close.
On the screen, "▲" changes to "Reading" and then playback will commence.



- Press [PLAY] for CDs to start playback.
- Some discs may not start automatically, depending on the disc.
- If it is an Audio CD, the status display (page E33) is displayed.
- If it is an MP3/WMA/JPEG CD, the file menu (page E18) is displayed.
- If it is a KODAK Picture CD, the thumbnail pictures (page E19) are displayed.

- 6 You can adjust the volume by pressing [VOLUME] +/- on the unit or on the remote control.



Notes:

- Even if you stop playback, the disc is always spinning, so if you have inserted a disc and the unit is jolted, it may cause damage to the disc or cause the unit to break down.
- Please do not move this unit during playback as it may make it skip and/or scratch the disc.
- When listening to a CD at high volume, it may cause the CD skip; if this happens, please turn down the volume.
- Please do not place more than 1 disc nor anything other than a disc in the disc tray.
- Please do not place anything in front of the disc tray. When the disc tray is opened, it may knock it over.

Stopping Playback

Press [STOP].

“■” appears on the screen for approx. 4 seconds.

To continue playback from the stopped point

Using the Auto Resume function, when you press [PLAY] again, it starts playing from the point at which you stopped it.

When it is playing back or is operating in the Auto Resume function, if you switch the operation mode or even turn off the power, the Auto Resume function is not lost. (The next time you switch to DVD mode or turn the power back on, it will start playback from the point at which you stopped it.)

When stopping fully

If you press [STOP] again or unload the disc, the unit will clear the stopped point.

It comes to a full stop and the next time you play it back, it will start from the beginning of the disc.

Still Playback

Press [PAUSE] during normal playback.

“II” will be displayed for about 4 seconds on the screen.

- To resume normal playback, press [PLAY].

Removing a Disc

Press [DISC OPEN] on the unit.

After the “▲” symbol flashes on the screen, the disc tray will open.

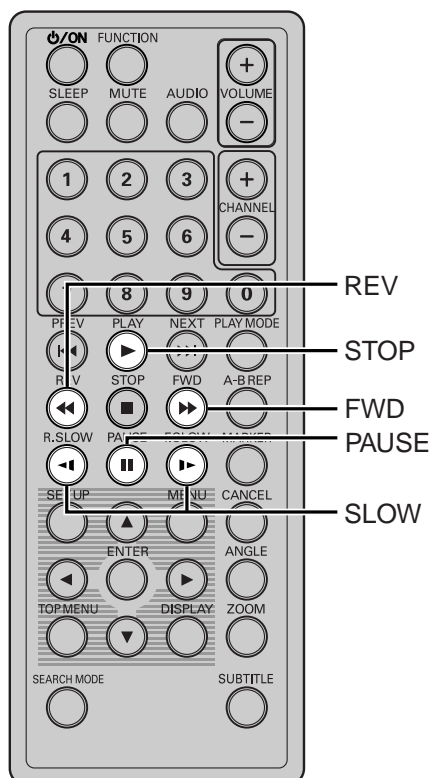
- After removing the disc, push the disc tray to close.

Explanation for On-Screen-Symbol (DVD)

Symbol	Meaning of Symbols	Symbol	Meaning of Symbols	Symbol	Meaning of Symbols
	Playback		Frame advanced playback		A-B repeat
	Auto resume		Fast Forward playback (X2)		Subtitle language
	Stop		Review playback (X2)		Soundtrack language
	Still picture		Skip chapter to forward direction		Karaoke vocal setting
	Forward slow motion		Skip chapter to reverse direction		Angle
	Reverse slow motion		Open the tray		Zoom
			Direction button's mark		Shows prohibited act

Note:

Some discs may be displayed wrong or e.g. chapter number, playback time, etc. may not be displayed.



Fast Playback

You can fast forward or rewind a DVD while viewing it. You can also fast forward or rewind an Audio CD while listening to it. (You cannot do this with an MP3/WMA/JPEG CD.)

Press [FWD] or [REV] during normal playback. Each press of [FWD] or [REV] will increase the speed of the search as follows.

[FWD]

▶▶ (x2) → ▶▶▶ (x4) → ▶▶▶▶ (x8) → ▶▶▶▶▶ (x20) → ▶▶ (x2)...

[REV]

◀◀ (x2) → ◀◀◀ (x4) → ◀◀◀◀ (x8) → ◀◀◀◀◀ (x20) → ◀◀ (x2)...

- To resume normal playback, press [PLAY].
- The search speed may vary according to the CD.
- The melody of a song may not be recognized when using ▶▶▶▶ or ▶▶▶▶▶, depending on the CD, so we recommend using either ▶▶ or ▶▶▶.

Frame Advance



You can play back one frame at a time.

Press [PAUSE] during still playback. One frame is advanced each time you press [PAUSE].

- To resume normal playback, press [PLAY].
- You cannot use Frame Advance with Audio CDs or MP3/WMA/JPEG CDs.

Slow Motion Playback



You can use slow motion in either forward or reverse.

Press [R.SLOW] or [F.SLOW] during normal playback or still playback.

Each press of the button will change the speed of the slow as follows.

[F.SLOW]

▶ 1/2 → ▶ 1/4 → ▶ 1/6 → ▶ 1/7 → ▶ 1/2...

[R.SLOW]

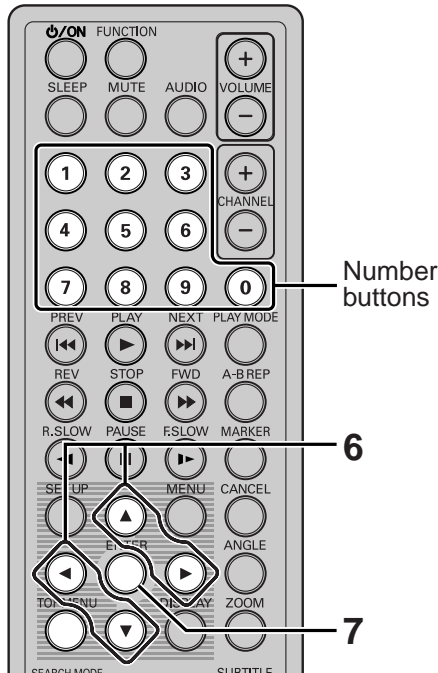
◀ 1/2 → ◀ 1/4 → ◀ 1/6 → ◀ 1/7 → ◀ 1/2...

- To resume normal playback, press [PLAY].
- To resume the still playback, press [PAUSE].
- You cannot use slow motion with Audio CDs or MP3/WMA/JPEG CDs.

Important Note:

“” may appear on the TV screen during operation. This icon means that the function is not available on the disc now.

MP3/WMA CD OPERATION



File menu

Operation	Media type	Folder	File number	File type	Elapsed time
CD-R	Pops	1 Bay Bridge	8 442	Japan	1/94 00:01
		2 442 BLUE EYES	9 442	Lies and Truth-	
		3 442 Blurry Eyes	10 442	Rain	
		4 442 CLOSE MY EYES	11 442	Strawberry	
		5 442 DIVE TO BLUE	12 442	Thailand	
		6 442 flower	13 442	Welcome party	
		7 442 Honey	14 442	winter fall	

Notes on MP3/WMA files:

1. Use MP3/WMA software that records data alphabetically or numerically.
2. Name each file including two-digit or three-digit number (e.g. "01" "02" or "001" "002").
3. Refrain from making too many sub-folders.

Notes:

- Some MP3/WMA CDs can not be played back depending on the recording conditions.
- The CD-R/RW that has no music data or non-MP3/WMA files can not be played back.
- During MP3/WMA-Playback, you can not use SEARCH, A-B Repeat functions.
- You can use Repeat (Track or All), Random functions and Program playback for MP3/WMA CD Playback (see page E25 and E26).

MP3/WMA CD Playback

Repeat steps 1 ~ 5 on page E15.

A file menu will appear on the screen.

- 6** Press [◀] or [▶] to select the folder, then press [▲], [▼], [◀] or [▶] to select the desired file.

CD-R	Pops	1/94	--:--
1 442	Bay Bridge	8 442	Japan
2 442	BLUE EYES	9 442	Lies and Truth-
3 442	Blurry Eyes	10 442	Rain
4 442	CLOSE MY EYES	11 442	Strawberry
5 442	DIVE TO BLUE	12 442	Thailand
6 442	flower	13 442	Welcome party
7 442	Honey	14 442	winter fall

- In case the folder includes more than 15 files, press [◀] or [▶] to display next file list.
- You can also select files using number buttons [0-9].

- 7** Press [ENTER].
The selected file starts playing back.

CD-R	Pops	1/94	00:01
1 442	Bay Bridge	8 442	Japan
2 442	BLUE EYES	9 442	Lies and Truth-
3 442	Blurry Eyes	10 442	Rain
4 442	CLOSE MY EYES	11 442	Strawberry
5 442	DIVE TO BLUE	12 442	Thailand
6 442	flower	13 442	Welcome party
7 442	Honey	14 442	winter fall

Limitations on MP3/WMA CD playback:

- MP3/WMA CD is the disc that is standardized by ISO9660, its file name must include 3-digits extension letters, "mp3" or "wma".
- The directory and file names of the MP3/WMA CD must be correspond to the ISO standardized files.
- This unit can read 200 files per disc. If one directory has more than 200 files, it reads up to 200 files, the remaining files will be omitted.
- The unit is able to recognize up to a maximum of 50 directories per disc.
- MP3/WMA CDs cannot be used for playback for the purpose of recording.
- If the CD has both audio tracks and MP3/WMA files, only audio tracks are played.
- It may take more than one minute for this unit to read MP3/WMA files depending on its structure.
- Music recorded by "Joliet Recording Specification" can be played back, the file name is displayed (within 16 letters) on the screen. Long file names will be condensed.
- The music files recorded by "Hierarchical File System" (HFS) cannot be played.

Limitations on display

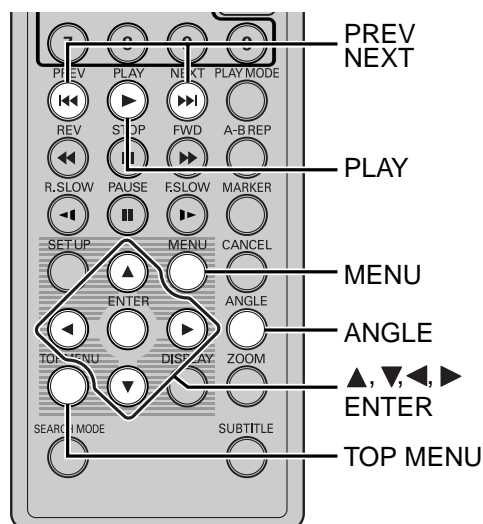
The maximum number for display is 16 letters. Available letters for display are the following: capital or small alphabets of A through Z, numbers of 0 through 9, and _ (under score). Other letters than those above are replaced in hyphen.

Microsoft, Windows Media, and Windows Logo are trademarks or registered trademarks of Microsoft Corporation in both the United States and other countries.

KODAK PICTURE CD PLAYBACK

With KODAK Picture CD, it's easy to turn film into pictures you can email from your PC and view on this unit!

Just bring your film in for processing, and check the box for KODAK Picture CD. You'll get back your prints and negatives as usual - plus you'll get a special CD that contains your pictures along with software that lets you view, enhance, share, and print your pictures from your computer and view them on this unit.



Before starting:

- The file system is ISO9660 Level 1 and Level 2.
- It would take 30 seconds or more for this unit to read KODAK Picture CD files depending on its structure.
- This unit can recognize up to 200 files or 50 folders per disc. The CD with 201 files or 51 folders and over is not available to this unit.

However, some KODAK Picture CDs cannot be played back depending on the recording conditions.

Before playing back KODAK Picture CD files, please read the following.

Limitations on display:

- The maximum number for display is 16 letters.
- Available letters for display are the following: capital or small alphabets of A through Z, and numbers of 0 through 9.
- Other letters than those above are replaced in "-" (hyphen).

Caution:

- Some KODAK Picture CDs cannot be played back depending on the recording conditions.
- The CD has no KODAK Picture CD files cannot be played back.

To Play the Picture One by One

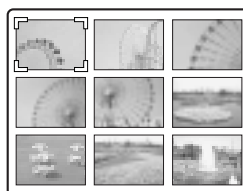
Preparation:

1. If a disc loaded, remove the disc first.
2. Set "Select Files" setting to "All" or "Pictures Only". Usually set to "All" (see page E34).

- 1 Load the disc with the label facing up on the disc tray. (Please refer to "MP3/WMA CD OPERATION" on page E18.)

- "Picture CD" appears briefly on the TV screen.
- The first thumbnail pictures (maximum 9-picture) appear on the TV screen.

Example:



- If you press [TOP MENU], the file list appears.

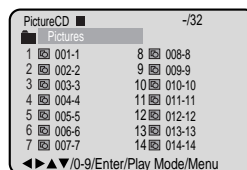
- 2 Press [▲], [▶], [▼] or [◀] to move the cursor to the desired picture.

- To go to the next or previous thumbnail pictures, press [NEXT] or [PREV].

• Selecting a picture from the file list

- 1) Press [TOP MENU], the file list appears on the TV screen.

Example:



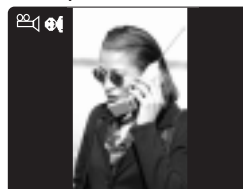
- If you press [MENU], the thumbnail pictures appear.

- 2) Press [◀], [▶] or [ENTER] to select folder.
 - 3) Press [▲], [▼], [◀], [▶] or number buttons [0-9] to select your desired file.
- In case the folder includes more than 15 files, press [◀] or [▶] to display next file list.

- 3 Press [ENTER] (or [PLAY]) to play the selected picture.

- If the picture appears upside down or sideways... Press [ANGLE] repeatedly until it's right side up.

Example:



- "⏮", "⏪", "⏩", "⏭" or "⏮" appears briefly on the TV screen.

- Press [NEXT] or [PREV] to skip to the next or previous picture.
- To stop the playback, press [STOP]. The thumbnail pictures appear on the TV screen.

Picture Zoom

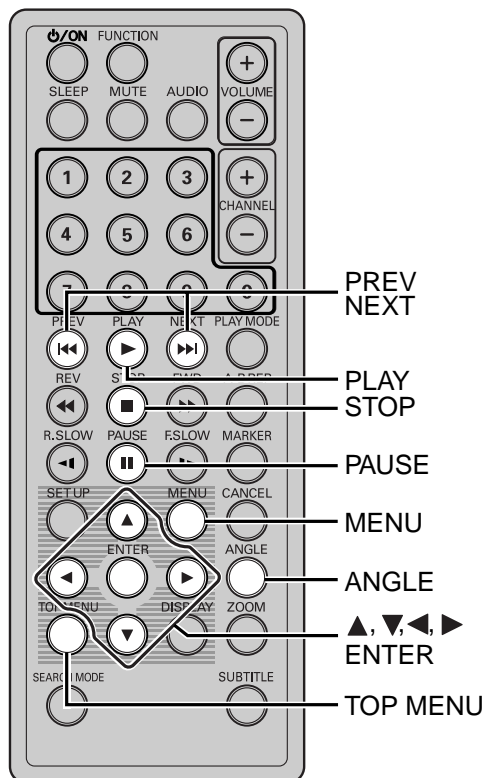
Please see page E23.

To Start the Slide Show

The slide show enables you to view pictures (files) one after another automatically.

Preparation:

1. If a disc loaded, remove the disc first.
2. Set "JPEG Interval" setting to "5 Seconds", "10 Seconds" or "15 Seconds" (see page E34).




Notes:

- FUJICOLOR CD can be used.
- Some discs cannot be played back depending on the recording conditions.
- MP3 or WMA file on the KODAK Picture CD is not recognized on this unit.

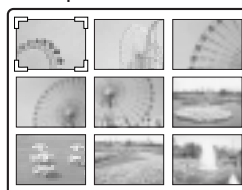
KODAK and Picture CD are registered trademarks of Eastman Kodak Company.

Important Note:

" " may appear on the TV screen during operation. This icon means that the function is not available on the disc now.

- 1 Load the disc with the label facing up on the disc tray. (Please refer to "MP3/WMA CD OPERATION" on page E18.)
 - "Picture CD" appears briefly on the TV screen.
 - The first thumbnail pictures (maximum 9-picture) appear on the TV screen.

Example:



- If you press [TOP MENU], the file list appears.

- 2 Press [▲], [▶], [▼] or [◀] to move the cursor to the desired picture.
 - To go to the next or previous thumbnail pictures, press [NEXT] or [PREV].
 - You can also select the desired picture from the file list. See "Selecting a picture from the file list" on page E19.

- 3 Press [ENTER] (or [PLAY]) to start slide show from the selected picture.
 - If you press [PAUSE] during the slide show, the slide show stops temporary. "II" appears briefly on the picture. Press [PLAY] (or [NEXT]) again to resume the slide show.
 - **If the picture appears upside down or sideways, please do the following steps.**
 - 1) Press [PAUSE], if necessary.
 - 2) Press [ANGLE] repeatedly until it's right side up.



- ", ", "" or "" appears briefly on the TV screen.

- 3) Press [PLAY] (or [NEXT]) to skip to the next picture and continue the slide show.
 - If you press [NEXT] or [PREV] during the slide show, it skips to the next or previous picture.



After the last picture has displayed, the thumbnail pictures appear.

- To stop the slide show, press [STOP]. The thumbnail pictures appear on the TV screen.
- If [MENU] pressed during the slide show, the thumbnail pictures appear.

JPEG CD PLAYBACK

Before starting

You can also view digital images from JPEG files on disc created by your computer.

- The file system is ISO9660 Level 1 and Level 2.
- This unit can playback baseline and progressive JPEG files.
- If the CD has both audio CD tracks and JPEG files, only audio CD tracks are played.
- It would take 30 seconds or more for this unit to read JPEG files depending on its structure.
- This unit can recognize up to 200 files or 50 folders per disc. The CD with 201 files or 51 folders and over is not available to this unit.
- JPEG files must have the extension letters, ".jpg", ".jpeg", ".JPG", ".JPEG", ".Jpg" or ".jpe".
- JPEG CD may not be played in the recorded order.
 1. Please use the JPEG software with the function that can record data alphabetically or numerically.
 2. Please refrain from making many sub-folders by preference.

However, some CD-R/RWs cannot be played back depending on the recording conditions. Before playing back JPEG files, please read the following.

Limitations on display

- The maximum number for display is 16 letters.
- Available letters for display are the following: capital or small alphabets of A through Z, and numbers of 0 through 9.
- Other letters than those above are replaced in "-" (hyphen).

Caution:

- Some JPEG CDs cannot be played back depending on the recording conditions.
- The CD has no JPEG files cannot be played back.

Note:

If the disc is loaded with the label side downward, or if a badly scratched disc is loaded, "Err (Error)" appears on the FL display and "Incorrect Disc" appears on the TV screen. If this occurs, load the disc correctly or replace the disc.

To Play the Picture One by One

Preparation:

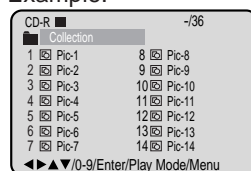
1. If a disc loaded, remove the disc first.
2. Set "Select Files" setting to "All" or "Pictures Only". Usually set to "All" (see page E34).

1

Load the disc with the label facing up on the disc tray. (Please refer to "MP3/WMA CD OPERATION" on page 18.)

- The file list appears on the TV screen.

Example:



- If you press [MENU], the thumbnail pictures appear.

2

Press [◀], [▶] or [ENTER] to select folder.

3

Press [▲], [▼], [◀], [▶] or number buttons [0-9] to select your desired file.

- In case the folder include more than 15 files, press [◀] or [▶] to display next file list.

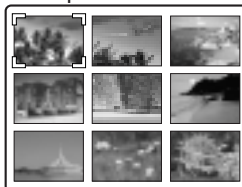
4

Press [ENTER] to play the selected picture.

- **Selecting a picture from the thumbnail pictures**

1) Press [MENU], the thumbnail pictures appear.

Example:



- If you press [TOP MENU], the file list appears.

2) Press [▲], [▶], [▼] or [◀] to move the cursor to the desired picture.

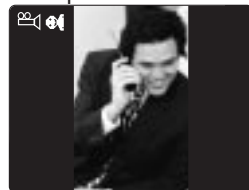
- To go to the next or previous thumbnail pictures, press [NEXT] or [PREV].

3) Press [ENTER] (or [PLAY]) to play the selected picture.

- **If the picture appears upside down or sideways...**

Press [ANGLE] repeatedly until it's right side up.

Example:

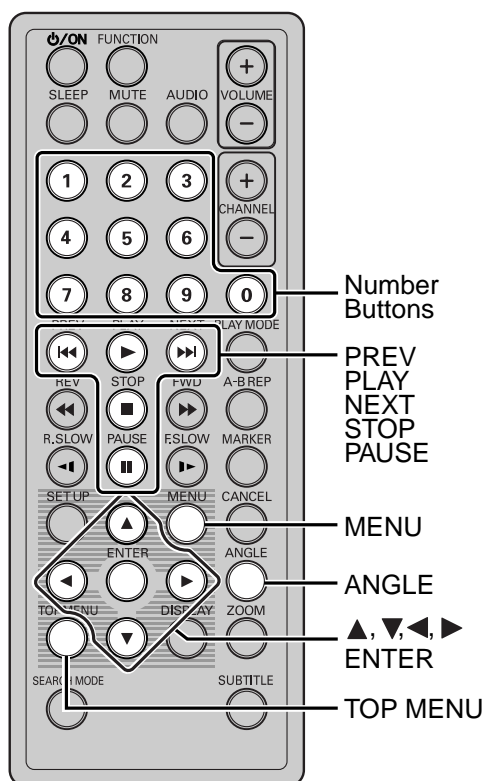


- "꺾", "꺾", "꺾" or "꺾" appears briefly on the TV screen.

- Press [NEXT] or [PREV] to skip to the next or previous picture.
- To stop the playback, press [STOP]. The file list appears.

Picture Zoom

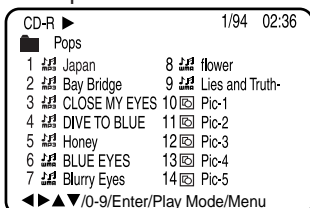
Please see page E23.



If the disc is mixed with MP3, WMA and JPEG files...

1. Press [▲], [▶], [▼] or [◀] to move the highlighted box to the desired file.

Example:



Indicates MP3-file

Indicates WMA-file

Indicates JPEG-file

2. Press [ENTER] to start playback (or slide show).
 - If you start from the MP3 or WMA file, the unit plays both MP3 and WMA files. But the unit skips the JPEG files automatically.
 - If you start from the JPEG file, the unit plays the JPEG files. But the unit skips both MP3 and WMA files automatically.
 - If you want to display only MP3/WMA or JPEG file, you need to set "Select Files" on page E34.

Important Note:

"" may appear on the TV screen during operation. This icon means that the function is not available on the disc now.

To start the Slide Show

The slide show enables you to view pictures (files) one after another automatically.

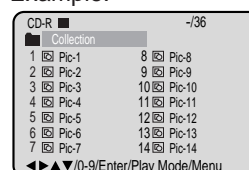
Preparation:

1. If a disc loaded, remove the disc first.
2. Set "JPEG Interval" setting to "5 Seconds", "10 Seconds" or "15 Seconds" (see page E34).

- 1 Load the disc with the label facing up on the disc tray. (Please refer to "MP3/WMA CD OPERATION" on page E18.)

- The file list appears on the TV screen.

Example:



- If you press [MENU], the thumbnail pictures appear.

- 2 Press [◀], [▶] or [ENTER] to select folder.

- 3 Press [▲], [▼], [◀], [▶] or number buttons [0-9] to select your desired file.

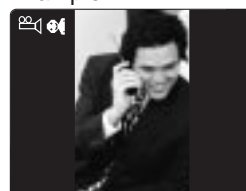
- In case the folder include more than 15 files, press [◀] or [▶] to display next file list.
- You can also select the desired picture from the thumbnail pictures. See "Selecting a picture from the thumbnail pictures" on page E21.

- 4 Press [ENTER] to start slide show from the selected file.
 - If you press [PAUSE] during the slide show, the slide show stops temporary. "II" appears briefly on the picture. Press [PLAY] (or [NEXT]) again to resume the slide show.

- If the picture appears upside down or sideways, please do the following steps.

- 1) Press [PAUSE], if necessary.
- 2) Press [ANGLE] repeatedly until it's right side up.

Example:



"", "", "", or "" appears briefly on the TV screen.

- 3) Press [PLAY] (or [NEXT]) to skip to the next picture and continue the slide show.
- If you press [NEXT] or [PREV] during the slide show, it skips to the next or previous picture.



After the last picture has displayed, the file list appears.

- To stop the slide show, press [STOP]. The file list appears.
- If [MENU] is pressed during the slide show, the thumbnail pictures appear.

PICTURE ZOOM/LOCATING DESIRED SCENE

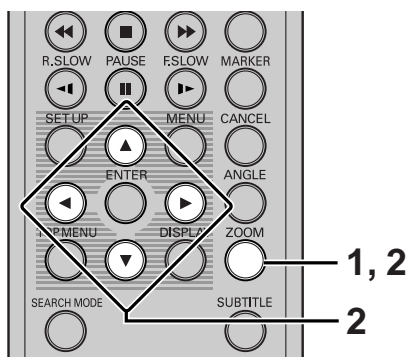
DVD

CD

MP3

WMA

JPEG



Picture Zoom

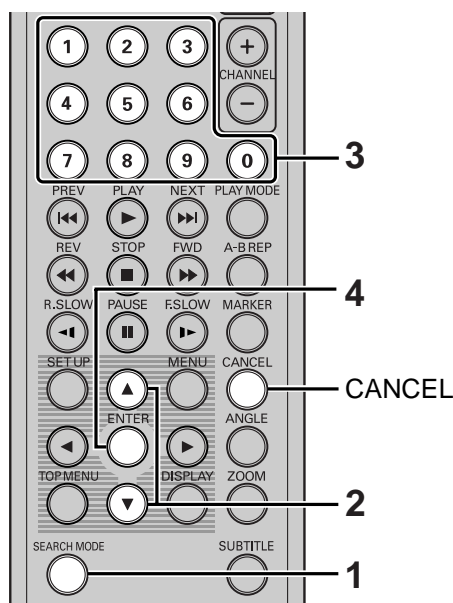
DVD

This unit will allow you to zoom in on the frame image. You can then make selections by switching the position of the frame.

- 1 Press [ZOOM] during playback or still playback. The center part of the image will be zoomed in. If you press [ZOOM] repeatedly, you can enlarge it further.



- 2 Press [▲], [▼], [◀] or [▶] to view a different part of the frame. In the zoom mode press [ZOOM] repeatedly to return to a 1:1 view (Q Off).



Locating Desired Scene

DVD

CD

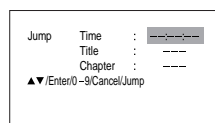
You can specify the position in a DVD or CD disc from which you wish to playback and easily get to that point and start playing.

With DVD discs you can specify an elapsed time from the beginning or a title or chapter number. With Audio CDs, you can specify either the elapsed time from the first track or a track number.

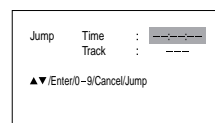
- 1 Press [SEARCH MODE] during playback or stop mode.

- 2 Press [▲] or [▼] to select the desired item.

DVD

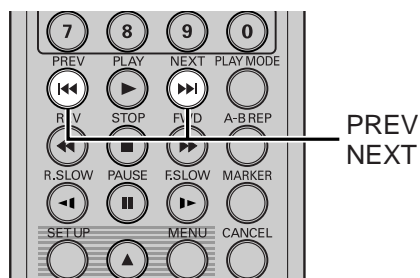


Audio CD



- 3 Press the number buttons [0–9] to input the desired track number or time.
 - If you input a wrong number, press [CANCEL].
 - Refer to the package supplied with the disc to check the numbers.

- 4 Press [ENTER] to start playback.
 - When you change the title, playback starts from Chapter 1 of the selected title.



Locating a Chapter or Track

DVD

CD

MP3

WMA

JPEG

With DVDs you can skip to the next chapter or to the beginning of the current chapter.

With Audio CDs and MP3/WMA/JPEG CDs you can skip to the next track or to the beginning of the current track.

Press [NEXT] or [PREV] during playback.

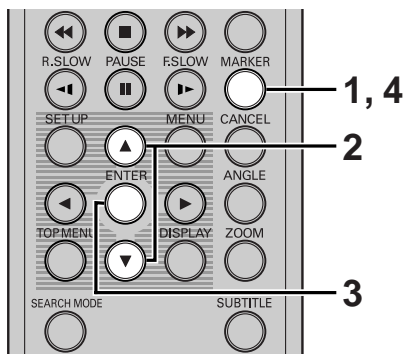
Note:

Some discs may not work with Picture Zoom or Locating Desired Scene operation.

MARKING DESIRED SCENES



The unit stores the points that you want to watch again up to 3 points. You can resume playback from each scene.



Marking the Scenes

- 1 Press [MARKER] during playback.

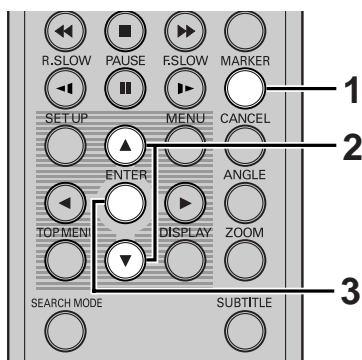
Marker 1 : *****
Marker 2 : *****
Marker 3 : *****
▲▼/Enter/Cancel/Marker

- 2 Select the blank Marker using [▲] or [▼].

- 3 Press [ENTER] at the desired scene.
The time when you press [ENTER] is set.

Marker 1 : 00:27:54
Marker 2 : *****
Marker 3 : *****
▲▼/Enter/Cancel/Marker

- 4 Press [MARKER] again to close the "Marker" screen.
 - The unit stores the points that you want to watch again up to 3 points.



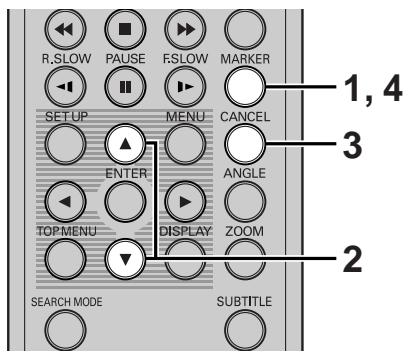
Returning to the Scenes

- 1 Press [MARKER] during playback or stop mode.

Marker 1 : 00:27:54
Marker 2 : 01:16:25
Marker 3 : 02:08:31
▲▼/Enter/Cancel/Marker

- 2 Press [▲] or [▼] to select the Marker 1 ~ 3.

- 3 Press [ENTER].
Playback starts from the marked scene.



To Cancel the Mark

- 1 Press [MARKER] during playback or stop mode.

- 2 Press [▲] or [▼] to select the Marker 1 ~ 3.

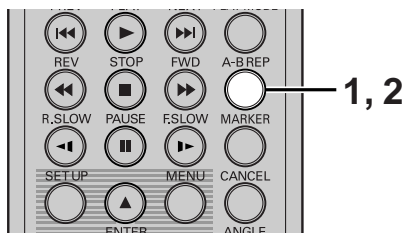
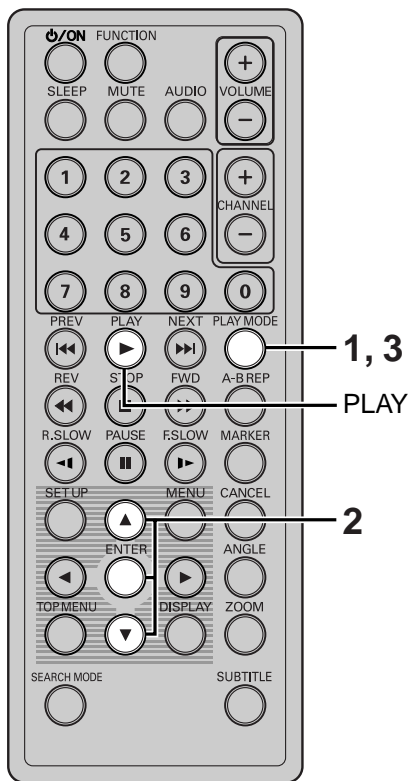
- 3 Press [CANCEL].

- 4 Press [MARKER] again to close the "Marker" screen.

Notes:

- Some discs may not work with the marking operation.
- The marking is canceled when you open the disc tray or turn the power off.
- Some subtitles recorded around the marker may fail to appear.
- You cannot do marking operations with MP3/WMA/JPEG CDs.

REPEAT PLAYBACK



Notes:

- Some discs may not work with the repeat operation.
- In A-B repeat mode, subtitles near point A or B may not appear.
- During Repeat Playback, you cannot use A-B Repeat Playback.
- If you select Repeat Playback during A-B Repeat Playback, the A-B Repeat Playback is canceled.
- A-B Repeat Playback is not available in multi-angle scenes.
- You may not be able to set A-B Repeat, depending on the scenes of the DVD.

Repeat Playback



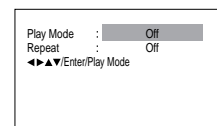
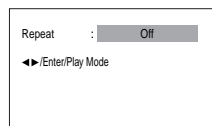
With DVD discs you can play the same chapter or title repeatedly.

With Audio CD/MP3/WMA/JPEG CDs you can repeat either 1 track or all tracks.

- 1 Press [PLAY MODE] during playback or stop mode.

DVD

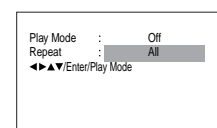
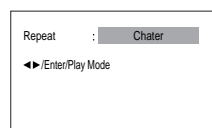
Audio CD/MP3/WMA/JPEG CD



- 2 Press [◀], [▶] or [ENTER] to make selections. With Audio CD/MP3/WMA/JPEG CDs, press [▲] or [▼] to select "Repeat", then make selections.

DVD

Audio CD/MP3/WMA/JPEG CD



- When you select "Chapter" or "Track" in the playback mode, it will repeatedly play the chapter or track currently being played.
- When you select a "Chapter" or "Track" in the stop mode, it will play the first chapter or track after you press [PLAY].

- 3 Press [PLAY MODE] again to close the "Play Mode" screen.

A-B Repeat Playback



(Doesn't work with MP3/WMA/JPEG CDs)

A-B repeat playback allows you to repeat material between two selected points.

- 1 Press [A-B REP] during playback. The start point (A) is selected.



- 2 Press [A-B REP] at the point you wish to make the end point for Repeat Playback. The end point (B) is selected and the section between point (A) and (B) is played repeatedly.

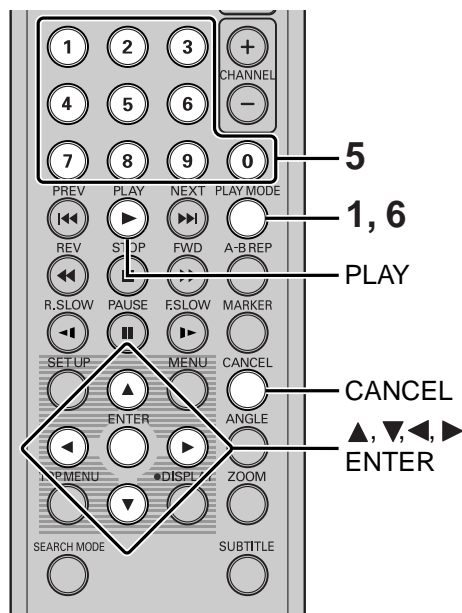
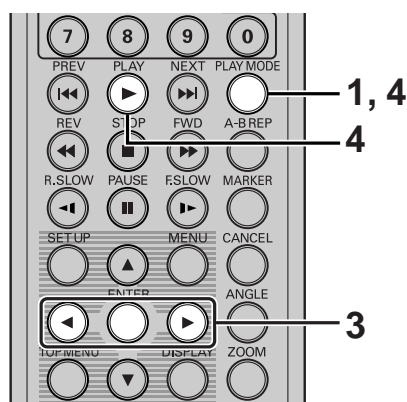


- Playback stops at the end point, returns to the start point (A) automatically, then starts again.
- To resume normal playback press [A-B REP] again. "Off" appears on the screen.

RANDOM PLAYBACK/PROGRAM PLAYBACK



Random playback and Program playback can be used with Audio and MP3/WMA/JPEG CDs.



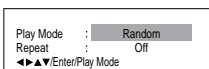
Notes:

- If you wish to switch the mode to "Off" or "Random" from the program screen, press [▲] to select "Program", then press [◀] or [▶] to select "Off" or "Random".
- The program is canceled when you open the disc tray or turn the power off.
- Program Repeat cannot be done.

Random Playback

The unit will select tracks or files at random and play them back.

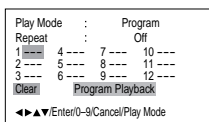
- 1 Press [PLAY MODE] during playback or in the stop mode.
- 2 Make sure "Play Mode" is selected.
- 3 Press [◀], [▶] or [ENTER] to select "Random".
- 4 Press [PLAY].
Random playback will start.
 - If you select "Random" during playback, Random Playback will begin after the track that is currently being played has ended.
 - To return to normal playback, follow steps 1 ~ 2 and select "Off" in step 3, and press [PLAY MODE].



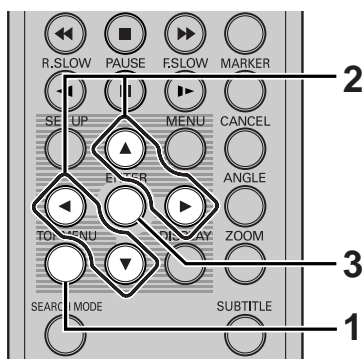
Program Playback

You can select and arrange the order of tracks on the disc.

- 1 Press [PLAY MODE] in the stop mode.
 - You cannot set a program during playback.
- 2 Make sure "Play Mode" is selected.
- 3 Press [◀], [▶] or [ENTER] to select "Program".
- 4 Press [▲], [▼], [◀] or [▶] to select the place you wish to program.
- 5 Press the number buttons [0–9] to select the track number.
 - If you input a wrong number, press [CANCEL].
- 6 Press [▲], [▼], [◀] or [▶] to select "Program Playback" and press [ENTER].
Program playback starts in the programmed order.
 - Even if you stop using [STOP], if you press [PLAY], it will start the program playback again.
 - When you wish to stop the program playback, follow steps 1 ~ 2 and select "Off" in step 3 and press [PLAY MODE]. (The program remains until the CD is removed or power is turned off.)
 - To delete a program, stop playback, follow steps 1 ~ 3 and select "Cancel" in step 4 and then press [ENTER]. Press [PLAY MODE] to close the "Play Mode" screen.



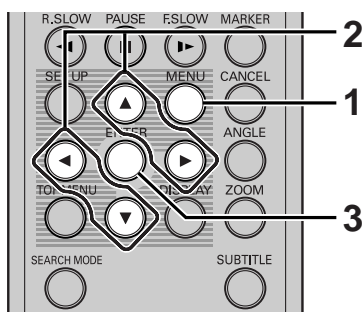
TITLE SELECTION/DVD MENU/CHANGING ANGLES



Title Selection

Two or more titles are recorded on some discs. If the title menu is recorded on the disc, you can select the desired title.

- 1** Press [TOP MENU].
Title menu appears on the screen.
- 2** Press [▲], [▼], [◀] or [▶] to select the desired title.
- 3** Press [ENTER].
The playback of the selected title will start.

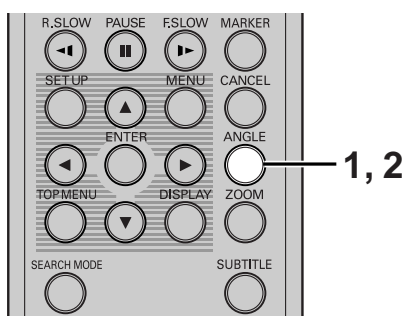


DVD Menu

Some DVDs allow you to select the disc contents using the menu.

When you play back these DVDs, you can select the sub-title language and soundtrack language, etc. using the DVD menu.

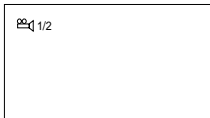
- 1** Press [MENU].
The DVD menu appears on the screen.
- 2** Press [▲], [▼], [◀] or [▶] to select the desired item.
- 3** Press [ENTER].
If the menu continues to another screen, repeat steps 2 and 3 to set additional items if any.



Changing Angles

When playing back a disc recorded with multi-angle facility, you can change the view angle.

- 1** Press [ANGLE] during playback.
The current angle will appear.

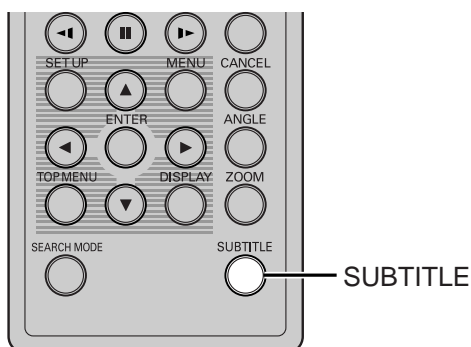


- 2** Press [ANGLE] repeatedly until the desired angle appears.

Notes:

- Depending on the DVD disc, a "title menu" may simply be called a "menu" or "title" in the instructions supplied with the disc.
- Depending on the DVD disc, you may not be able to select the title.
- Depending on the DVD disc, you may not be able to change the angles even if multi-angles are recorded on the DVD.

SUBTITLES/CHANGING SOUNDTRACK LANGUAGE

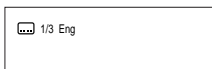


Subtitles

Changing the subtitle language

You can select the language when playing back a disc recorded with multilingual subtitles.

Press [SUBTITLE] repeatedly during playback until your desired language appears.



Turning the subtitles On and Off

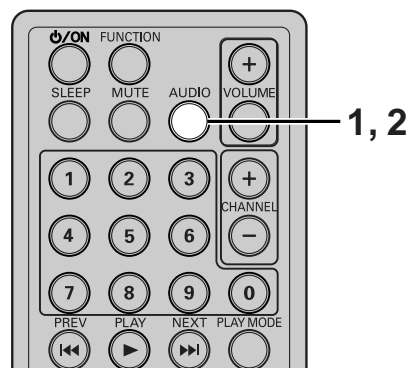
When playing back a disc recorded with subtitles, you can turn the subtitles on or off.

Press [SUBTITLE] during playback until "Off" appears.



Changing Soundtrack Language

You can select the language when you play a multilingual disc.



1

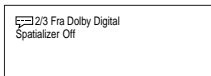
Press [AUDIO] during playback.

The current soundtrack language is displayed for approx. 4 seconds.



2

While the language is displayed, press [AUDIO] repeatedly to select your desired language.

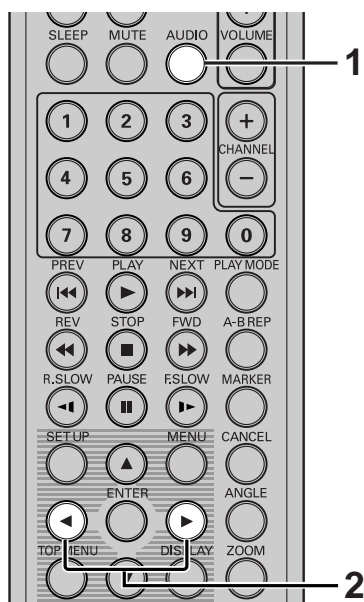


Notes:

- If the desired language is not found out after pressing the [SUBTITLE] or [AUDIO] several times, the language is not recorded on the disc.
- Changing soundtrack language or subtitle language is canceled when you open the disc tray. The initial default language or available language will be heard or seen if the disc is played back again.
- Depending on the DVD disc, you may not be able to turn subtitles on or off, or change subtitles. While playing the DVD, the subtitle may change when:
 - you open or close the disc tray.
 - you change the title.
- In some cases, the subtitle language is not changed to the selected one immediately.

- Even if you switch to DTS, no sound will come from the unit's speakers.

OTHER SOUNDTRACK SETTINGS

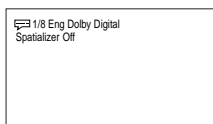


Setting Spatializer

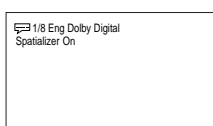


This unit equipped with a "SPATIALIZER N-2-2". It can produce the effect of being in a cinema or a concert hall.

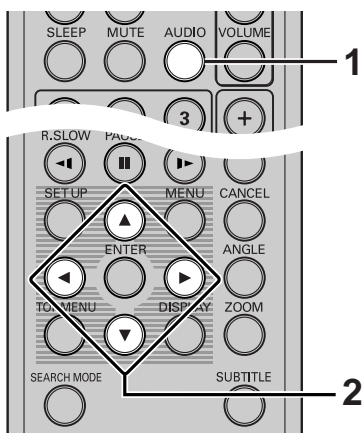
- 1 Press [AUDIO] during playback.
The current settings are displayed for 4 seconds.



- 2 Press [◀] or [▶] to select "On" or "Off" while the settings are displayed.



- If you select "On", an internal processor reduces the sound volume.
When viewing with the optical digital audio output (page E51), the volume will not be reduced.
- Once you turn off the power, the setting reverts to "Off" automatically.

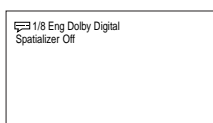


Karaoke Playback

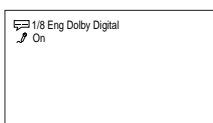


When playing back a DVD KARAOKE disc, you can turn the vocal on or off.

- 1 Press [AUDIO] during playback.
It displays whether the Spatializer is "Off" or "On".



- 2 Press [▲] or [▼] to select Karaoke vocal setting "♪", then press [◀] or [▶] to select "On" or "Off".



Note:

You may not be able to make settings for Karaoke vocals, depending on your DVD disc.



Certain audio features of this product manufactured under license from Desper Products, Inc. Spatializer and the circle - in - square device are trademarks owned by Desper Products, Inc.

SPATIALIZER N-2-2 is Dolby Virtual Surround, which is a format that easily recreates sound effects in stereo with depth.

It recreates the realism of multi-channel surround like Dolby Digital 5.1 ch or Dolby Surround while using just 2 speakers. (You cannot change the level).

SETTING OSD LANGUAGE

DVD

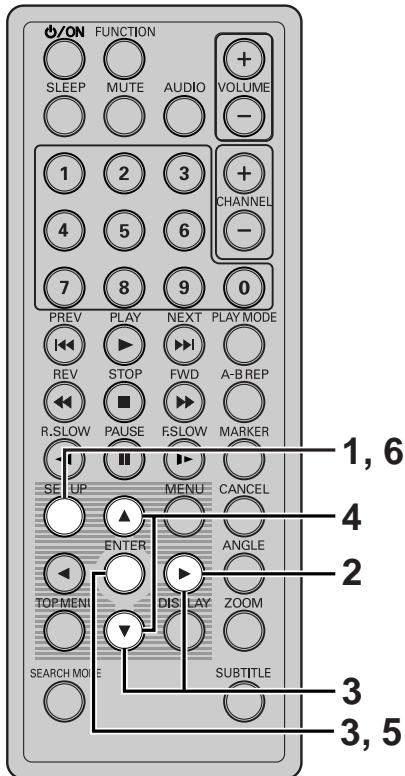
CD

MP3

WMA

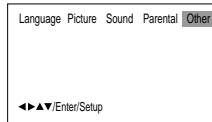
JPEG

You can choose from three different languages (English, Spanish, and French) for the on-screen displays.

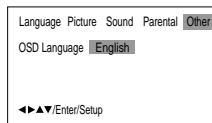


1 Press [SETUP] in the stop mode.
“Language” is selected.

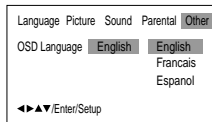
2 Press [▶] to select “Other”.



3 Press [▼] to select “OSD Language”, then press [▶] or [ENTER].



4 Press [▲] or [▼] to select your desired language.



5 Press [ENTER].
The selected language remains. (The OSD Language is changed.)

6 Press [SETUP] to close the screen.

SETTING LANGUAGE

DVD

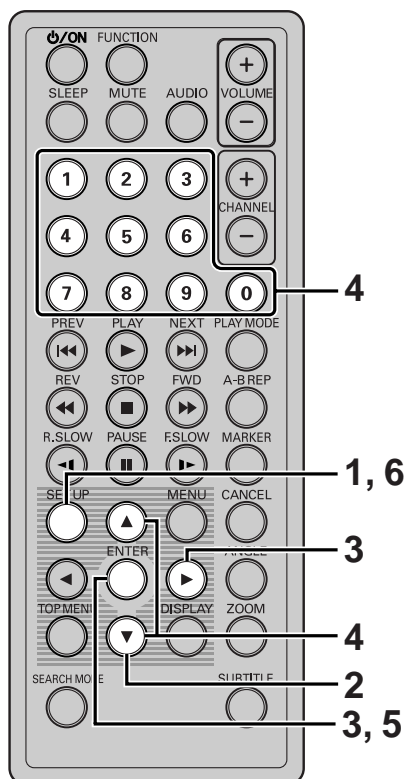
CD

MP3

WMA

JPEG

You can select a language if the DVD disc has more than one language for menus, subtitles or the soundtrack recorded onto it. The settings will be retained in the memory until they are changed, even if the power is turned off or the disc is replaced.

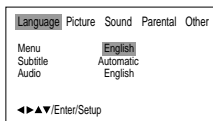


Notes:

- If you select a menu or subtitle language that has not been recorded onto a DVD disc, the default language setting of the disc will be used for menus and subtitles.
- If the selected soundtrack language is not recorded on the disc, the original language will be heard.
- Depending on the DVD disc, even if you specify a subtitle language, immediately after you put the disc in the player, the default language of the disc may be displayed.
- Depending on the DVD disc, even if you have specified English or another language for the soundtrack, the original language may be played back.

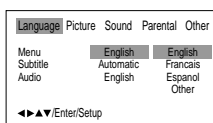
1 Press [SETUP] in the stop mode.
“Language” is selected.

2 Press [▼] to select a desired language item.



3 Press [▶] or [ENTER].

4 Press [▲] or [▼] to select a desired language.



English, Francais, Espanol:

The language you have selected will play if it is recorded on the disc.

Other:

If you want to select another language, enter the language code with the number buttons [0–9]. (See the language code list on page E50.)

Original: (Audio)

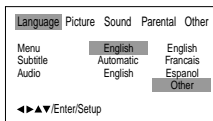
The unit will select the first priority language of each disc.

Automatic: (Subtitle)

- The unit will automatically select the same language in the AUDIO setting.
- When the unit selects the same language as the AUDIO, the subtitles will not appear during playback.
- When you do not use the same language as the AUDIO, the subtitles will appear during playback.

Off: (Subtitle)

Subtitles do not appear.

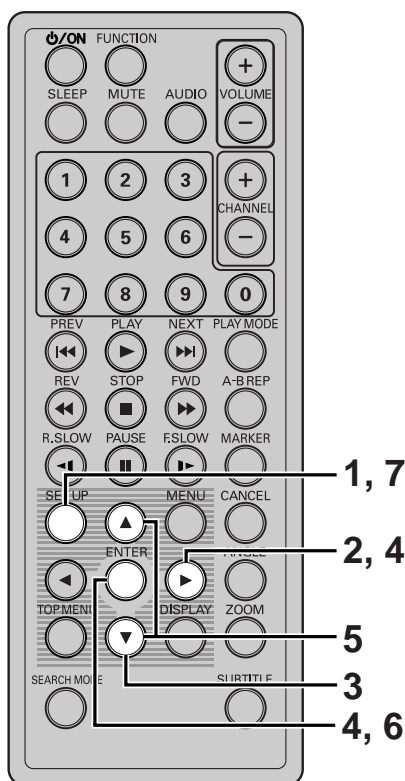


5 Press [ENTER].
The selected language remains.

6 Press [SETUP] to close the screen.

SETTING THE ASPECT RATIO OF TV SCREEN

You can set the screen size (Vertical/Horizontal Ratios) of this unit's LCD screen and the size of the TV screen connected to the unit. If you make this setting, the picture of your DVD's will be displayed at that size. The settings will be retained in the memory until they are changed, even if the power is turned off or the disc is replaced.



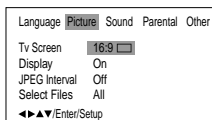
Notes:

- If the DVD disc is not formatted in the pan & scan style, it displays 4:3 style.
- Depending on the screen size that was recorded onto the disc, it may not be displayed according to the settings.

1 Press [SETUP] in the stop mode.
“Language” is selected.

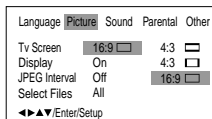
2 Press [▶] to select “Picture”.

3 Press [▼] to select “Tv Screen”.
“Tv Screen” is selected.



4 Press [▶] or [ENTER].

5 Press [▲] or [▼] to select your desired screen type.



4:3 (Letterbox):

Select when a conventional TV set is connected.

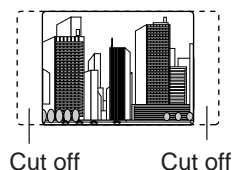
When the wide screen disc is played back, the black bands appear at the top and bottom of screen.



4:3 (Panscan):

Select when a conventional TV set is connected.

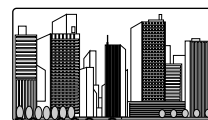
When the wide screen disc is played back, it displays pictures cropped to fill to your TV screen. The left and right edges are cut off.





16:9 (Wide screen):

Select when a wide screen TV set is connected.

Played in “FULL” size. (Setting the wide screen TV to “FULL” mode is also necessary.)

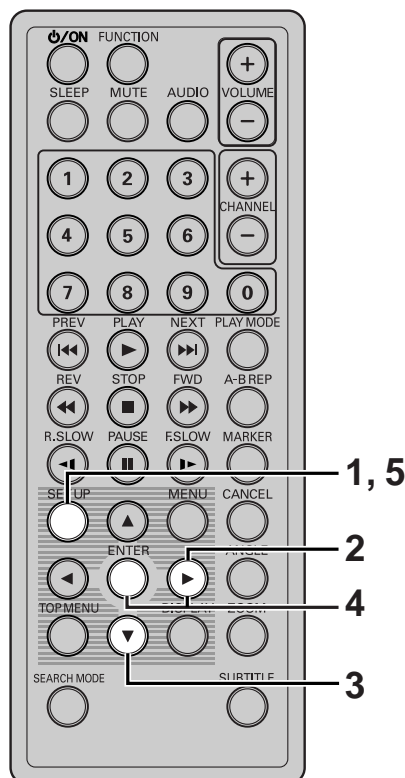


Notes:

- The screen size may differ depending on the DVD video discs.
- If you select 16:9  to get rid of the black bands on screen when wide screen disc is played back, picture may be slightly distorted.
- In some discs, even if 4:3  is selected, the black bands may remain on the screen.

6 Press [ENTER].
The TV screen size is set.

7 Press [SETUP] to close the screen.



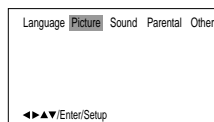
Setting On Screen Display



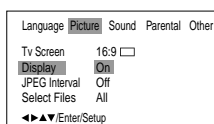
On screen display can be switched on or off when you press the buttons.

1 Press [SETUP] in the stop mode.
“Language” is selected.

2 Press [▶] to select “Picture”.



3 Press [▼] to select “Display”.



4 Press [▶] or [ENTER] to select “On” or “Off”.

- **On:**
The operating status of the disc is displayed on the screen.
- **Off:**
The on screen display only shows the settings screen, error displays and status display of the disc using [DISPLAY] below.

5 Press [SETUP] to close the screen.

Status Display of Disc

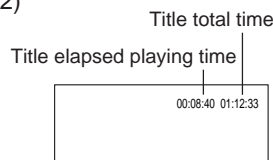
Press [DISPLAY] during playback.

Each press of [DISPLAY], the status display of the disc will appear on the screen and change as follows.

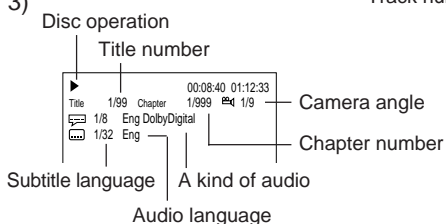
DVD

1) Nothing is displayed.

2)

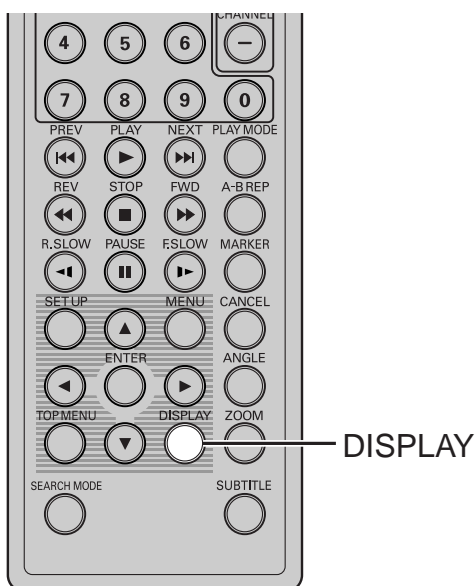
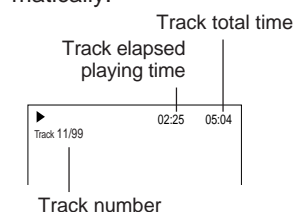


3)



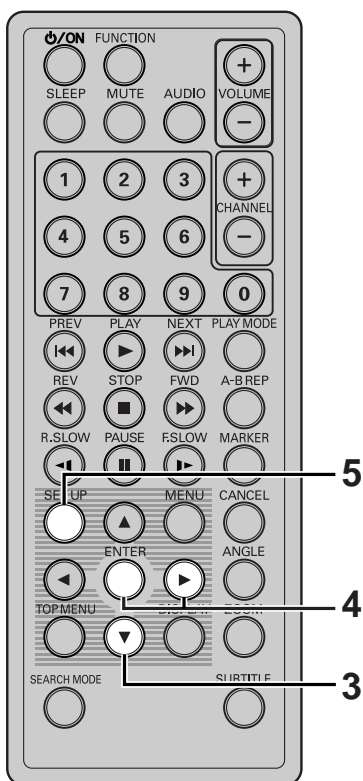
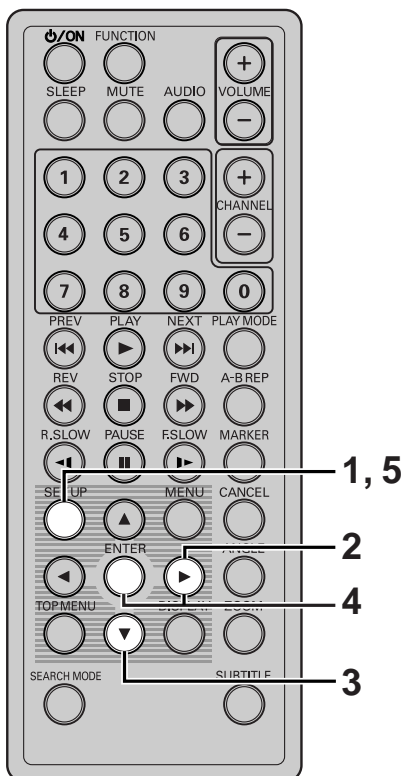
Audio CD

If you place a disc in, the disc menu is displayed automatically.



SETTING "JPEG INTERVAL"/SETTING "SELECT FILES"

MP3 WMA
JPEG

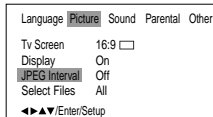


Setting "JPEG Interval"

JPEG

You can continuously play back all JPEG files automatically.

- 1 Press [SETUP] in the stop mode.
"Language" is selected.
- 2 Press [▶] to select "Picture".
- 3 Press [▼] to select "JPEG Interval".



- 4 Press [▶] or [ENTER] to select your desired time.
 - **Off:**
Plays back one file at a time.
 - **5 Seconds:**
Plays back images in the form of a slide show at 5-second intervals.
 - **10 Seconds:**
Plays back images in the form of a slide show at 10-second intervals.
 - **15 Seconds:**
Plays back images in the form of a slide show in 15-second intervals.

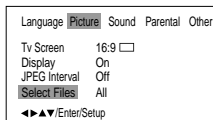
- 5 Press [SETUP] to close the screen.

Setting "Select Files"

When playing back a CD containing a mixture of MP3, WMA and JPEG files, only MP3/WMA or JPEG files can be displayed on the file menu.

Repeat steps 1 ~ 2 above.

- 3 Press [▼] to select "Select Files".

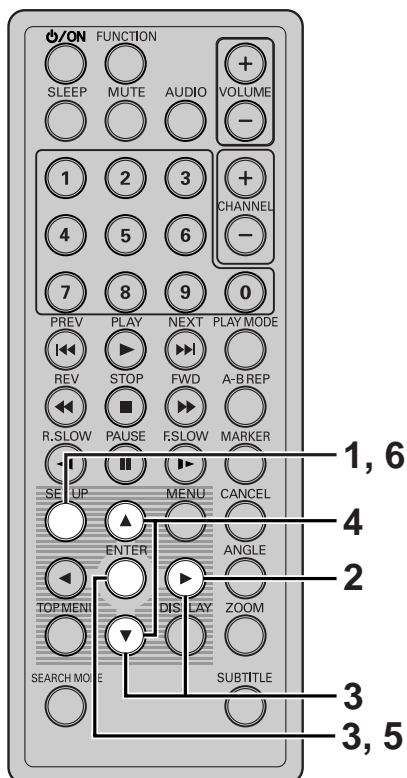


- 4 Press [▶] or [ENTER] to select your desired file type.
 - **All:**
Displays all files on the file menu.
 - **Music Only:**
Displays only MP3/WMA files on the file menu.
 - **Pictures Only:**
Displays only JPEG/KODAK Picture CD/FUJICOLOR CD files on the file menu.
- Note: Usually set to "All".**

- 5 Press [SETUP] to close the screen.

This function sets the DRC (Volume) for a DVD disc.

The settings will be retained in the memory until they are changed, even if the power is turned off or the disc is replaced.



Notes:

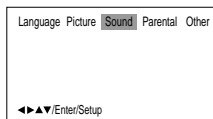
- This function works only during playback of Dolby Digital recorded discs.
- This function does not work with sound output from an optical terminal.
- DRC stands for Dynamic Range Control.
- If you feel the sound is distorted when you playback, switch the mode setting to "Std".

Dynamic Range Control

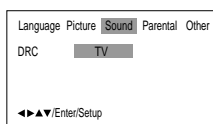
When you playback discs recorded with Dolby Digital, this function makes it easier to hear the sound from the connected TV, even if the volume is reduced.

1 Press [SETUP] in the stop mode.
"Language" is selected.

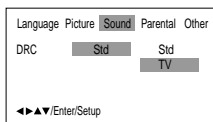
2 Press [▶] to select "Sound".



3 Press [▼] to select "DRC", then press [▶] or [ENTER].



4 Press [▲] or [▼] to select desired setting.



Std: Plays back with the sound recorded on the disc.

TV: When connect to the TV and set this if you feel the sound is too low.

5 Press [ENTER].

6 Press [SETUP] to close the screen.

PARENTAL CONTROL SETTING



Some discs are specified not suitable for children. Such discs can be limited not to play back with the unit.

If you set restrictions to who can watch this unit, you can prevent your children from watching violent scenes and adult pictures. However the viewer restrictions set here are only valid with discs with the parental control function.

Parental Control

MPAA (Motion Picture Association of America) Guideline is a rating system that provides advanced cautionary information to parent about the content of movie programs.

The parental lock level is equivalent to the following MPAA Rating System.

Level 7: NC-17 (No one 17 and under admitted)

Level 6: R (Restricted)

Level 4: PG-13 (Parents strongly cautioned)

Level 3: PG (Parental guidance suggested)

Level 1: G (General audiences)

Some DVD discs contain a restriction level which enables parents to prevent playback of discs by children. This unit is equipped with a password designed to prevent children changing the level.

You cannot play DVD video discs rated higher than the level you selected unless you cancel the parental lock function.

For example, when you select level "5", the unit will not play discs with ratings of "6", "7" or "8".

The information will appear on the TV screen. When you select level "Off", all DVD video discs can be played back.

If you forget the password...

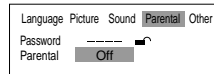
1. Press [DISC OPEN] to open the disc tray.
2. Remove the disc.
3. Press [DISC OPEN] again to close the tray. "No Disc" appears on the TV screen.
4. While holding [STOP] down on the front panel, press [7] on the remote control for 3 seconds. "PASSWORD CLEAR" appears on the TV screen.
5. Enter a new password again.

Note:

DVD video discs may or may not respond to the parental lock settings. Make sure this function works with your DVD video discs.

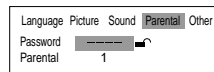
1 Press [SETUP] in the stop mode or No Disc.

2 Press [▶] to select "Parental".
Press [▼] to select "Parental".



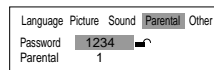
3 Press [◀], [▶] or [ENTER] to select the level (1 ~ 8) or "Off".

4 If you wish to lock the parental level, press [▲] to select "Password".



5 Press the number buttons [0-9] to input a 4-digit password.

The password you entered is displayed.



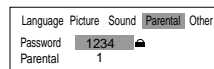
- If you input a wrong number, press [CANCEL].

6 Finish entering the password by pressing [ENTER].
"⏏" changes to "🔒".
By so doing, the parental levels cannot be changed without inputting the correct password.

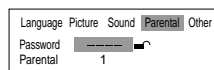
7 Press [SETUP] to close the screen.

To change or unlock the Parental Control Setting

1 Select "Password" on the step 2 above and press the number buttons [0-9] to input your 4-digit password.



2 Press [ENTER].
"🔒" changes to "⏏". The rating is now un locked.



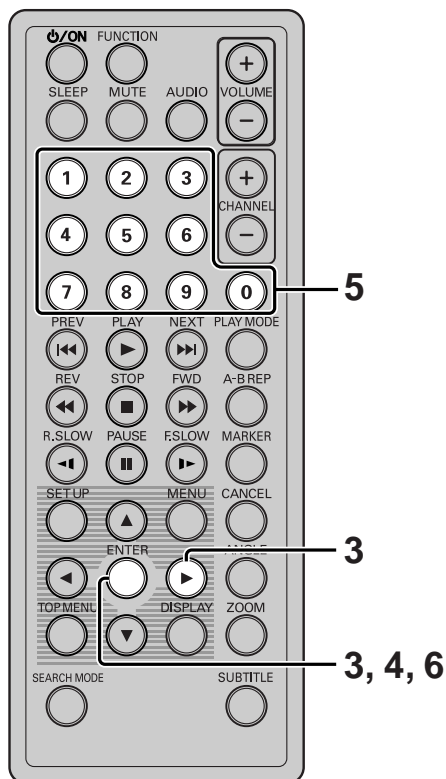
By so doing, you can change the parental levels. To cancel the viewer restrictions, select "Off" using [◀], [▶] or [ENTER].

TEMPORARY DISABLING OF RATING LEVEL BY DVD DISC



Depending on the DVD disc, the disc may try to temporarily cancel the rating level that you have set.

It is up to you to decide whether to cancel the rating level or not.

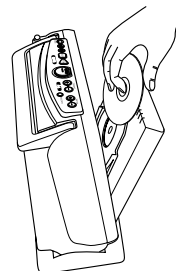


Note:

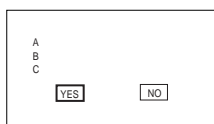
This temporary cancellation of rating level will be kept until the disc is ejected.

When the disc is ejected, the original rating level will be set again automatically.

- 1 Place a DVD disc on the disc tray and push the tray to close. (See page E15.)



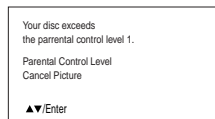
- 2 If the DVD disc has been designed to temporarily cancel the Rating level, the screen which appears after inserting a DVD will change, depending on which disc is played. "YES" is selected on the screen.



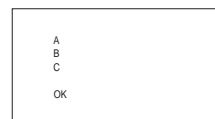
Depending on the disc, a viewer restriction selection screen is displayed.

- 3 If you wish to play back a disc, press [ENTER] while "YES" is selected. To stop playback, select "NO" by pressing [▶] and press [ENTER].

- selected "YES"



- selected "NO"



- 4 If you selected "YES", press [ENTER] while "Parental Control Level" is selected.

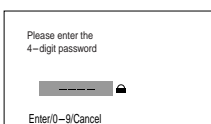
- If the 4-digits password at steps 4 ~ 6 on page E36 has been set, the password entering screen will appear as shown in step 5 below.

Alternatively, if the password has not been set, playback will commence.

- If you don't know (or have forgotten) the password, select "Cancel Picture".

The screen when "NO" is selected in step 3 will be displayed. Remove the disc using [DISC OPEN] on the unit.

- 5 Press the number buttons [0-9] to enter the password.

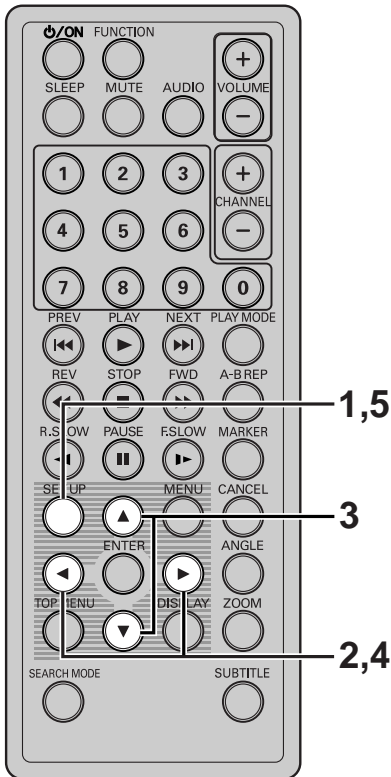


- 6 Press [ENTER]. Playback will commence if the entered password was correct.

SETTING THE CHILD LOCK

Locking the Disc Tray (Child Lock)

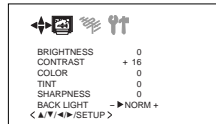
To prevent small children from opening the disc tray by mistake, you can lock the disc tray.



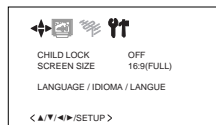
Note:

Even if "ON" is selected for the CHILD LOCK, if [DISC OPEN] is pressed for 5 seconds or more, the disc tray will open. (Even if you pressed [DISC OPEN] next, the tray would not open unless you press it for 5 seconds or longer. If you wish to open the disc tray immediately, select "OFF" in step 4.

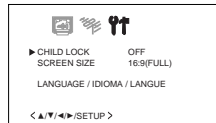
- 1 Press [SETUP] during DVD playback or TV mode or External Input mode.
The TV menu screen will appear.



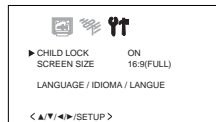
- 2 Press [◀] or [▶] to select "CHILD LOCK".



- 3 Press [▲] or [▼] to select "CHILD LOCK".



- 4 Press [◀] or [▶] to select "ON".

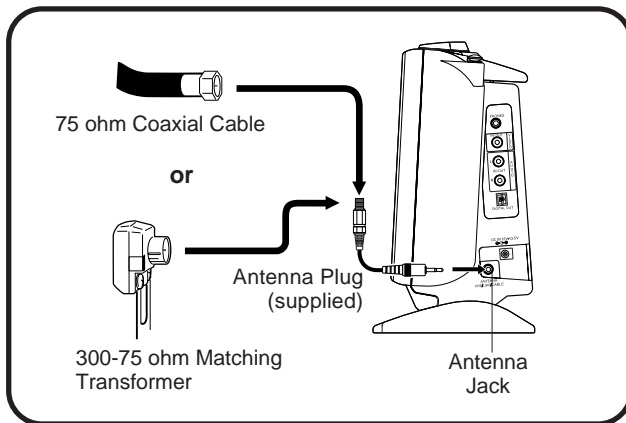


- 5 Press [SETUP] twice to close the TV menu screen.
If you press [DISC OPEN], "CHILD LOCK" is displayed on the screen for 4 seconds and the tray will not open if you press it just once.
To cancel the Child Lock, select "OFF" in step 4.

ANTENNA CONNECTIONS

If you are using an indoor or outdoor antenna, follow the instructions below that correspond to your antenna system. If you are using a cable TV service (CATV), see page E40 for "CATV CONNECTIONS".

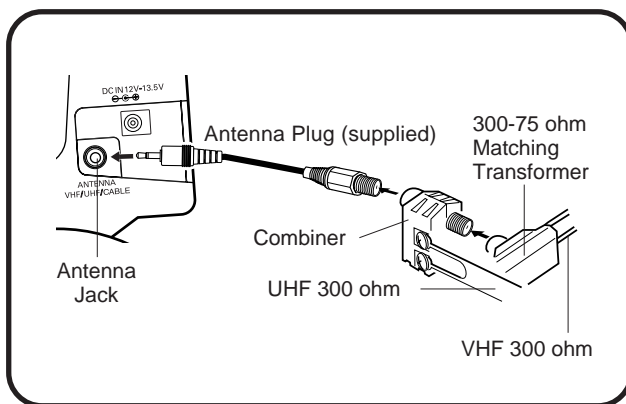
Combination VHF/UHF Antenna (Single 75 ohm Cable or 300 ohm Twin-lead Wire)



Connect the 75 ohm Cable from the Combination VHF/UHF Antenna to Antenna Plug (supplied) first, then attach the plug to the Antenna Jack.

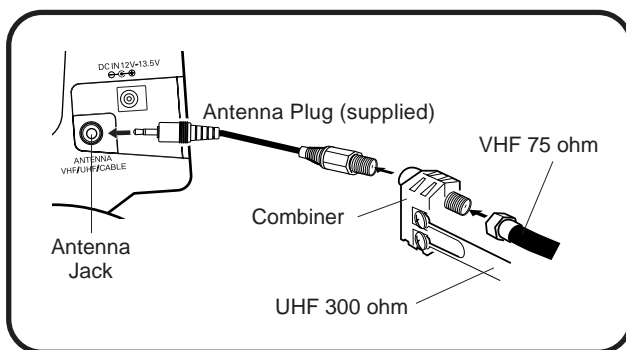
If your Combination VHF/UHF Antenna has a 300 ohm Twin-lead Wire, the use of the 300-75 ohm Matching Transformer may be necessary.

Combination VHF/UHF Antenna (Separate VHF and UHF 300 ohm Twin-lead Wires)



Connect the UHF 300 ohm Twin-lead Wire to the Combiner (not supplied). Connect the VHF 300 ohm Twin-lead Wire to the 300-75 ohm Matching Transformer. Attach the Transformer to the Combiner, then attach the Combiner to Antenna Plug (supplied), then attach the plug to the Antenna Jack.

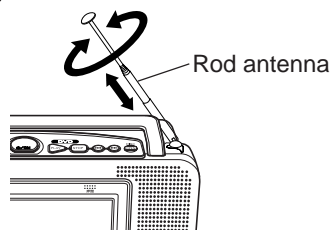
Separate VHF/UHF Antennas (75 ohm VHF Cable and 300 ohm UHF Twin-lead Wires)



Connect the VHF 75 ohm cable and UHF 300 ohm Twin-lead Wire to the Combiner. Attach the Combiner to Antenna Plug (supplied) first, then attach the plug to the Antenna Jack.

Adjusting the Rod Antenna

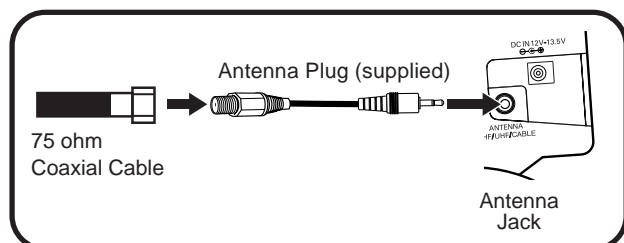
You can get a stable image by adjusting the orientation and length of the rod antenna.



CATV CONNECTIONS

This unit has an extended tuning range and can tune most cable channels without using a Cable TV Converter box. Some cable companies offer “premium pay channels” in which the signal is scrambled. Descrambling these signals for normal viewing requires the use of a descrambler device which is generally provided by the cable company.

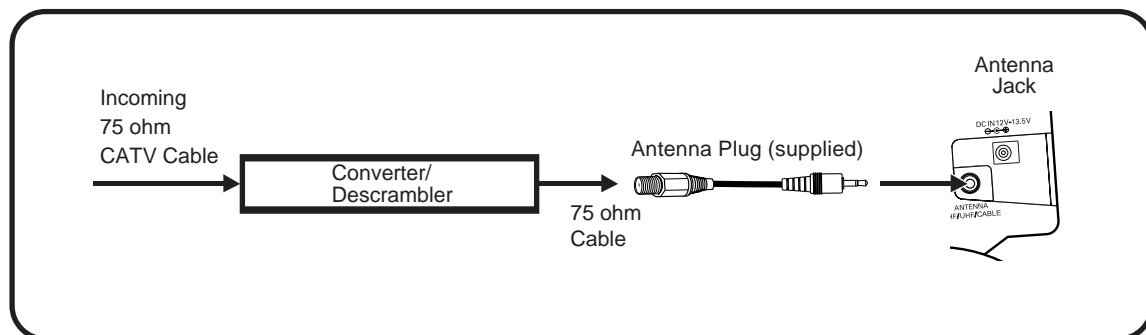
For Subscribers to Basic Cable TV Service



For basic cable service not requiring a Converter/Descrambler box, connect the CATV 75 ohm Coaxial Cable to the Antenna Plug (supplied) first, then connect the Antenna Plug to the Antenna Jack on the side of the unit.

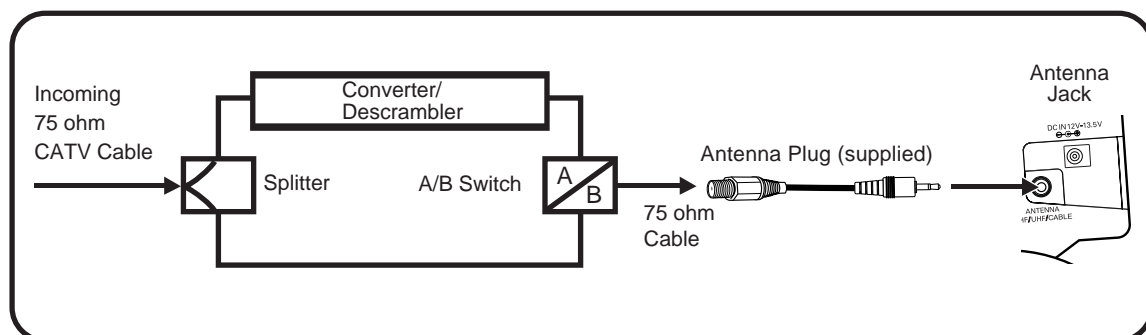
For Subscribers to Scrambled Cable TV Service

If you subscribe to a cable TV service which requires the use of a Converter/Descrambler box, connect the incoming 75 ohm Coaxial Cable to the Converter/Descrambler box. Using another 75 ohm Coaxial Cable, connect the output jack of the Converter/Descrambler box to the Antenna Plug (supplied) first, then connect the Antenna Plug to the Antenna Jack on the unit. Follow the connections shown below. Tune the unit to the output channel of the Converter/Descrambler box (usually channel 3 or 4) and use the Converter/Descrambler box to select channels.



For Subscribers to Unscrambled Basic Cable TV Service with Scrambled Premium Channels

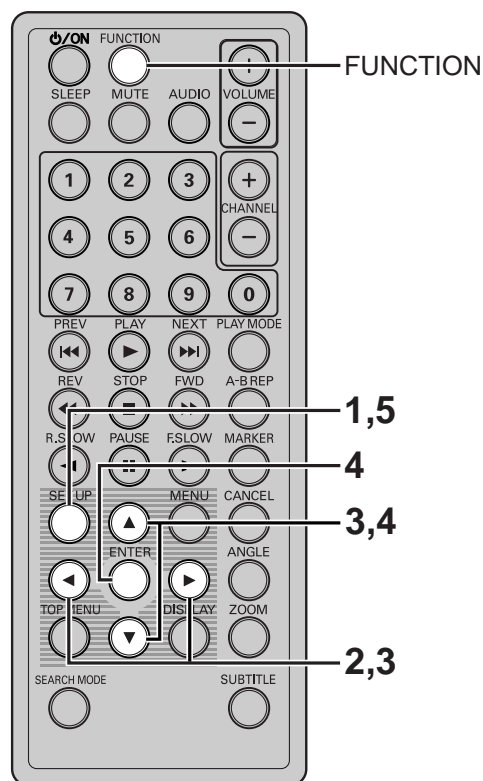
If you subscribe to a cable TV service in which basic channels are unscrambled and premium channels require the use of a Converter/Descrambler box, you may wish to use a signal Splitter and an A/B Switch box (available from the Cable company or an electronics supply store). Follow the connections shown below. With the switch in the “B” position, you can directly tune any nonscrambled channels on your unit. With the switch in the “A” position, tune your unit to the output of the Converter/Descrambler box (usually channel 3 or 4) and use the Converter/Descrambler box to tune scrambled channels.



SETTING THE LANGUAGE

You can choose from three different languages (English, French and Spanish) for the on-screen displays. Adjustment menus and messages will appear in the language of your choice.

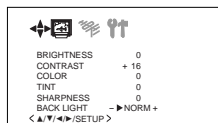
On-screen language selection (step 4) will automatically appear on the screen when you press [MENU] initially. Select the language you prefer first, then proceed with the other menu options.



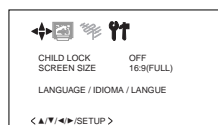
Preparation:

Press [FUNCTION] to select either the TV mode or External Input mode.

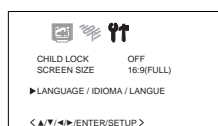
- 1 Press [SETUP].
The TV menu screen will appear.



- 2 Press [◀] or [▶] to select “IT”.



- 3 Press [▲] or [▼] to select “LANGUAGE”, then press [◀] or [▶].



- 4 Press [▲] or [▼] to select the desired language: English (ENGLISH), Spanish (ESPAÑOL) or French (FRANCAIS), then press [ENTER].



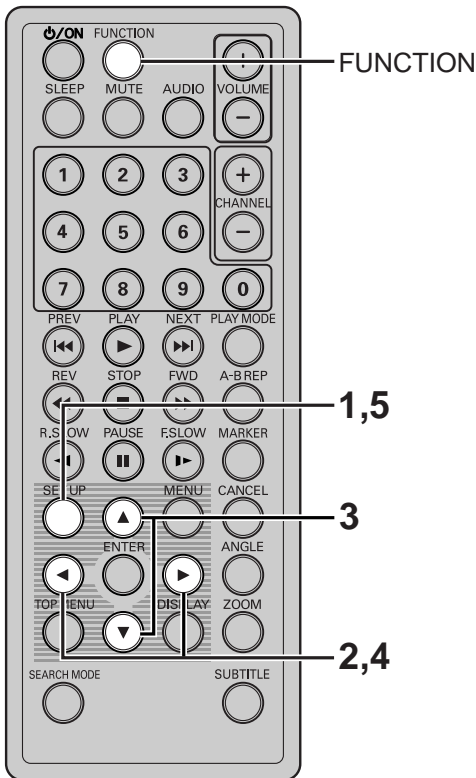
- 5 Press [SETUP] twice to close the TV menu screen.

Notes:

- If the unit does not operate properly, or No key operation (by the unit and/or the remote control): Static electricity, etc., may affect the player's operation. Disconnect the AC power cord once, then connect it again.
- The TV section has its own menu and also DVD section has its own menu (see page E11).

TO MEMORIZE CHANNELS

This unit is equipped with a channel memory feature which allows channels to skip up or down to the next channel set into memory, skipping over unwanted channels. Before selecting channels, they must be programmed into the unit's memory. In addition to normal VHF and UHF channels, this unit can receive up to 113 Cable TV channels. To use this unit with an antenna, set the TV/CATV menu option to the TV mode. When shipped from the factory, this menu option is in the CATV mode.

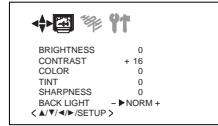


TV/CATV Selection

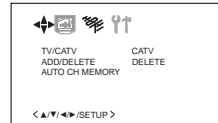
Preparation:

Press [FUNCTION] to select the TV mode.

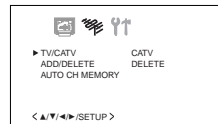
- 1 Press [SETUP].
The TV menu screen will appear.



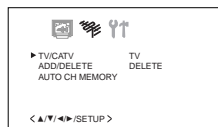
- 2 Press [◀] or [▶] to select "CATV".



- 3 Press [▲] or [▼] to select "TV/CATV".



- 4 Press [◀] or [▶] to select "TV" or "CATV" mode.



TV - VHF/UHF channels
CATV - CABLE TV channels

- 5 Press [SETUP] twice to close the TV menu screen.

CATV chart

The chart below is typical of many cable system channel allocations.

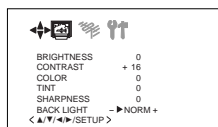
Number on this TV Corresponding CATV channel										14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW
59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77
WW	AAA	BBB	CCC	DDD	EEE	FFF	GGG	HHH	III	JJJ	KKK	LLL	MMM	NNN	OOO	PPP	QQQ	RRR
77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
RRR	SSS	TTT	UUU	VVV	WWW	XXX	YYY	ZZZ	AAA	BBB	CCC	DDD	EEE	FFF	GGG	HHH	III	JJJ
95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113
A-3	A-4	A-3	A-2	A-1	100	101	102	103	104	105	106	107	108	109	110	111	112	113
113	114	115	116	117	118	119	120	121	122	123	124	125	01					
113	114	115	116	117	118	119	120	121	122	123	124	125	5A					

Automatic Memory Tuning

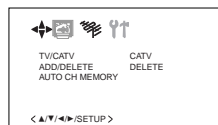
Preparation:

Press [FUNCTION] to select the TV mode.

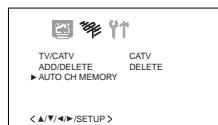
- 1 Press [SETUP].
The TV menu screen will appear.



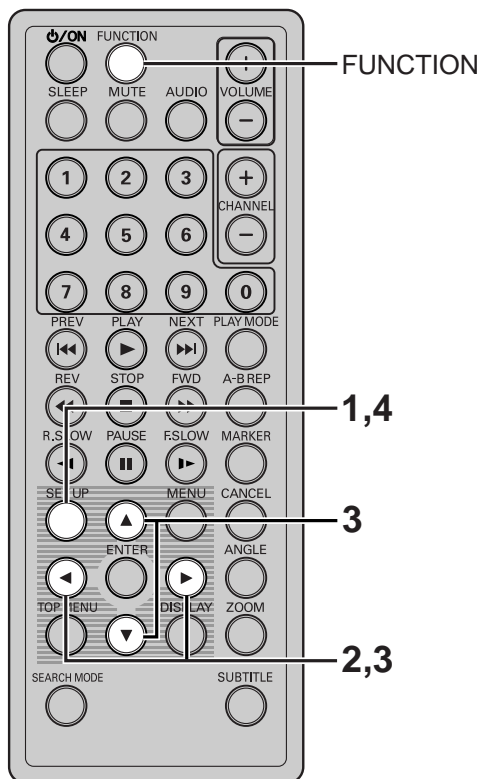
- 2 Press [◀] or [▶] to select “”.
The TV menu screen will appear.



- 3 Press [▲] or [▼] to select “AUTO CH MEMORY”, then press [◀] or [▶]. The TV will begin memorizing all the channels available in your area.



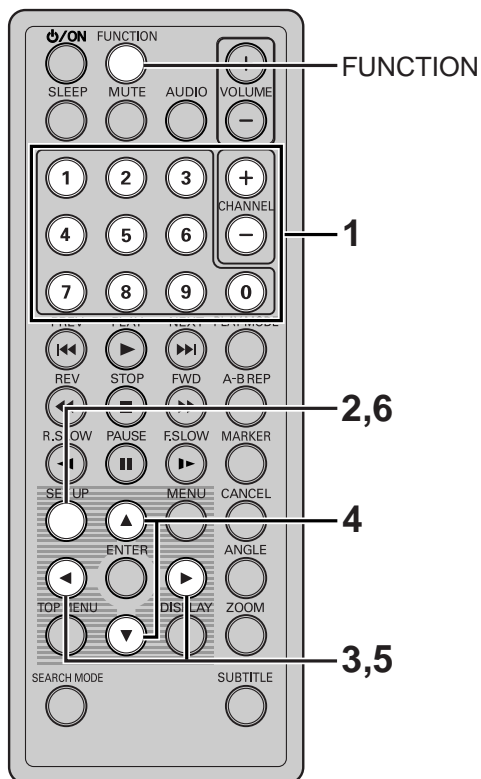
- 4 Press [SETUP] twice to close the TV menu screen.



To Add/Delete Channels

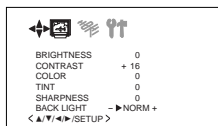
Preparation:

Press [FUNCTION] to select the TV mode.

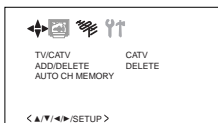


1 Select the desired channel to be memorized or deleted using Direct channel selection [0–9], or [CHANNEL] + or –.

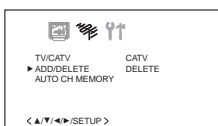
2 Press [SETUP].
The TV menu screen will appear.



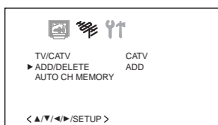
3 Press [◀] or [▶] to select “”.



4 Press [▲] or [▼] to select the “ADD/DELETE”.



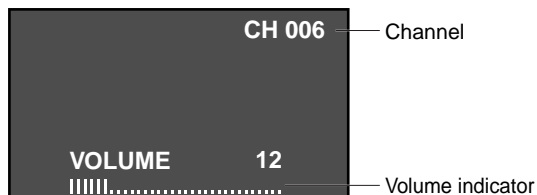
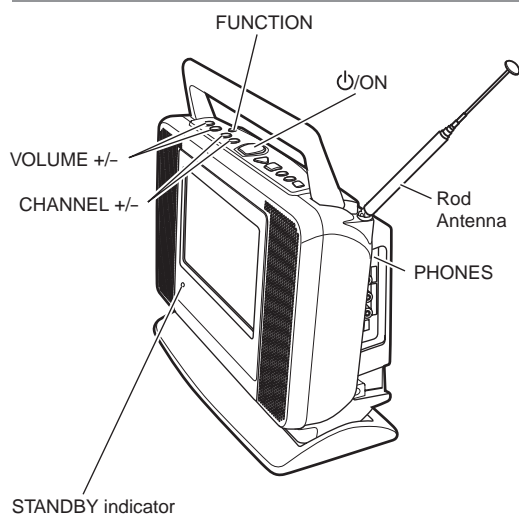
5 Press [◀] or [▶] to select “ADD” or “DELETE”, whichever function you want to perform.



6 Press [SETUP] twice to close the TV menu screen.

7 Repeat steps 1 ~ 6 for other channels you want to add or delete.

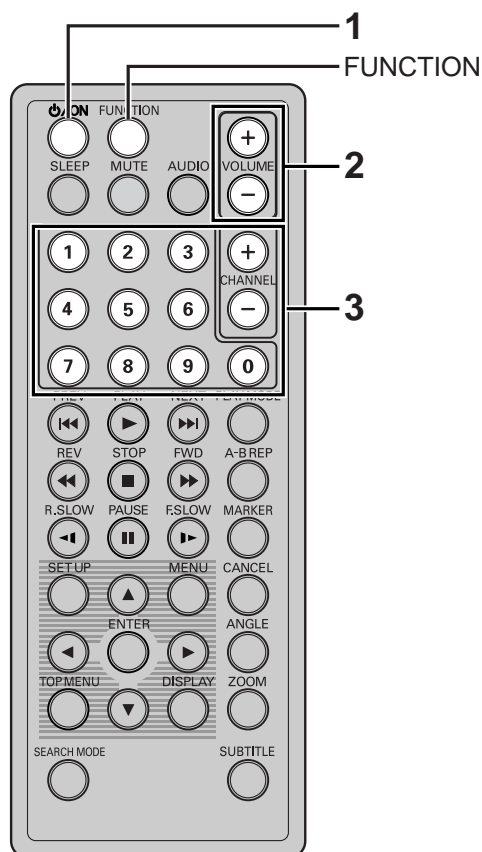
TV OPERATION



Preparation:

- Connect the antenna correctly.
When you are using a rod antenna, adjust it to where it gets the best reception.
- Connect the unit to a AC outlet using the supplied AC adaptor and power cord.

Basic Operation



- 1 To turn on the unit, press [ON/OFF].
 • Every time you turn on the power, it will be in the TV mode and the TV screen is displayed.
 • When anything other than the TV screen is displayed, switch the mode of operation by pressing [FUNCTION]. When turning off the power (Standby mode), the STANDBY indicator comes on. When you turn the power on, it turns off.

- 2 Adjust the volume level by pressing [VOLUME] +/-.

- 3 Press the Direct Channel selection [0–9] to select the channel.
 • You can select channels in order using [CHANNEL] +/-.

Listening with Headphones

Connect headphones (not supplied) to the PHONES jack on the side of the unit.

- Please use mini-plug headphones.
- If you connect headphones, the speakers are muted.

Watching Videos

Press [FUNCTION] to select the External input mode. Each time you press the button, the screen will change as follows.

TV mode → External Input mode → DVD mode → TV mode...

If you select the External Input mode, you can see the external source from the devices connected to the AUDIO/VIDEO IN jacks on the side of the main unit.

Notes:

- The display that appears when the unit is operated will disappear after a few seconds to 1 minute in order to preserve the LCD screen.
- When you will not use it for some time, such as when you are traveling, unplug the AC adaptor from the outlet.

Mute

Press [MUTE].

The sound can be switched back on by pressing this button again or [VOLUME] +/-.

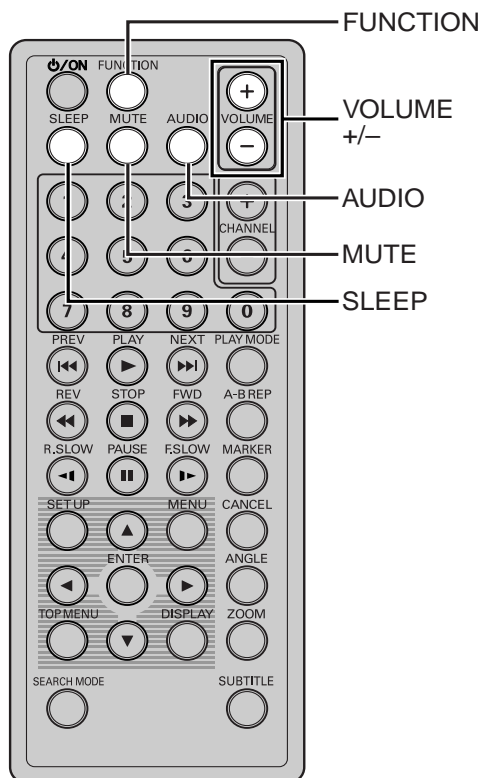
Sleep

If you set the sleep timer, the power is switched OFF automatically at the set time.

Select the desired time by pressing [SLEEP].

Every time you press [SLEEP], the time until power is turned OFF is displayed in 10 minute intervals in order: 120→110...20→10→0. The display disappears for approx. 4 seconds.

- To cancel the sleep timer, press [SLEEP] repeatedly until the display turns to "0".
- If you press [SLEEP] while working the sleep timer, the remaining time until power off is displayed.
- To change the time setting, press [SLEEP] repeatedly and set the desired time.



Stereo and Second Audio Program (SAP)

This unit is equipped with a feature known as Multi-channel TV Sound or MTS. MTS broadcasts greatly enhance TV viewing by bringing you programs with high fidelity stereo sound.

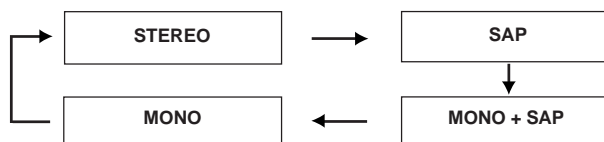
MTS also provides an extra channel called the Second Audio Program or SAP which broadcasters can use to transmit a second language for bilingual transmission or for other purposes.

Listening to stereo or SAP sound

When the TV is turned on or a channel selection is made, make certain the "STEREO" or "SAP" appears on the screen. This means that stereo or SAP broadcasting is available.

To select desired sound

Press [AUDIO] repeatedly to select either "STEREO", "SAP", "MONO+SAP" or "MONO".

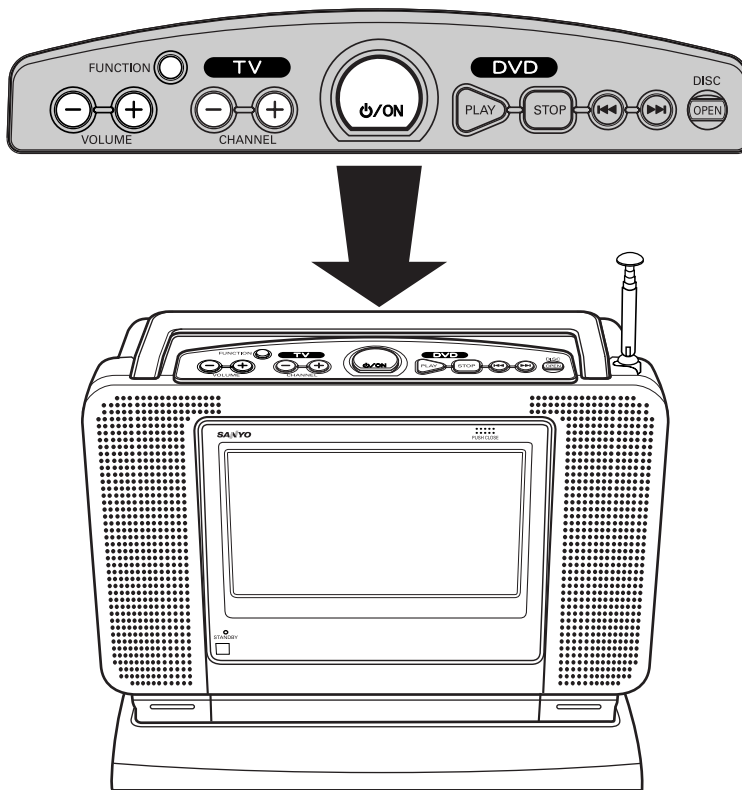


Notes:

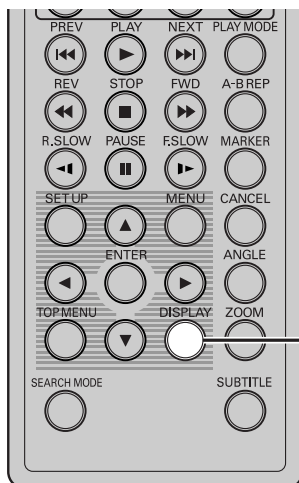
- If a station being viewed stops broadcasting, the TV will automatically shut itself off after 15 minutes.
- When viewing with an external device, such as your TV, the sound will not disappear even if you press [MUTE].
- If the broadcast signal is not strong enough or clear stereo sound is not available, press [AUDIO] to change to mono sound. The noise should be eliminated. Press it again to return to the stereo sound.
- When "Mono" broadcasting is received, no indication is displayed.

To Operate the Buttons on the Unit

You can operate the buttons ([ϕ /ON], [CHANNEL] +/-, [VOLUME] +/-, [FUNCTION]) on the unit.



Status Display of TV

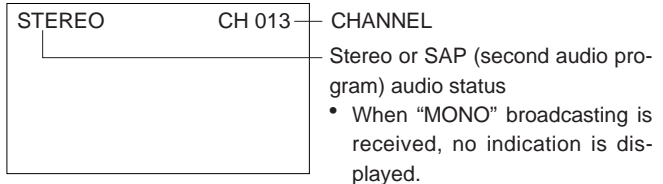


DISPLAY

Press [DISPLAY].

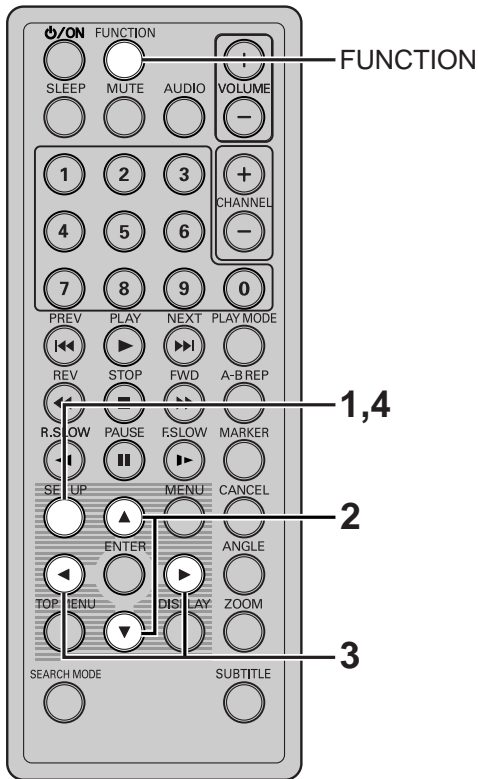
Reception status of the channel and sound will be displayed on the TV screen. The sound reception status will disappear after about 4 seconds.

- If you press once more, the display will disappear.
- Press [DISPLAY] again to clear the call display.



PICTURE CONTROL ADJUSTMENT

You can adjust the picture quality to suit the brightness of the room and the programs you watch.

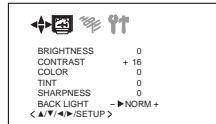


Preparation:

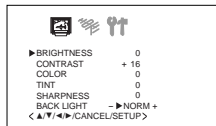
Press [FUNCTION] to either the TV mode or External Input mode.

For example, adjusting the brightness:

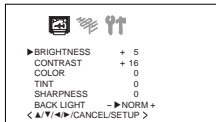
- 1 Press [SETUP].
The TV menu screen will appear. (" " is selected.)



- 2 Press [▲] or [▼] to select "BRIGHTNESS".



- 3 Press [◀] or [▶] to adjust the setting.



- When adjusting another item, repeat steps 2 ~ 3.

- 4 Press [SETUP] twice to close the TV menu screen.

Note:

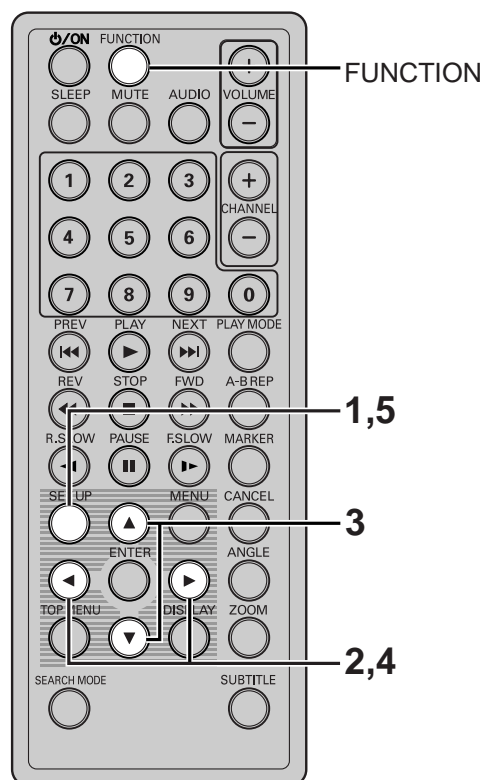
The screen display that comes up when operating disappears in several seconds to 1 minute in order to protect the LCD display.

Picture Adjustment Guidelines

Item	[◀]	[▶]	Adjustment Guideline
BRIGHTNESS	Darker	Lighter	Set to match room brightness
CONTRAST	Lower	Higher	To the contrast you like
COLOR	Paler	Deeper	Slightly pale for easy viewing
TINT	Reddish	Greenish	For showing skin tones, greens naturally
SHARPNESS	Softer	Sharper	Smooths out graininess
BACK LIGHT	Darker	Lighter	Switches the brightness of the LCD display in 3 levels

SETTING THE ASPECT RATIO OF TV SCREEN

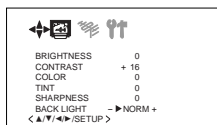
When you view with a TV or via an External input, you can switch the screen size of the LCD display (vertical/horizontal ratios). The settings will be retained in the memory until they are changed, even if the power is turned off.




Preparation:

Press [FUNCTION] to either the TV mode or External Input mode.

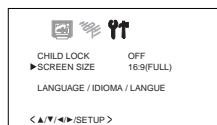
- 1 Press [SETUP].
The TV menu screen will appear.



- 2 Press [◀] or [▶] to select “”.



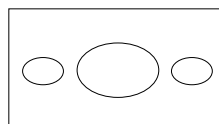
- 3 Press [▲] or [▼] to select “SCREEN SIZE”.



- 4 Press [◀] or [▶] to select screen size.

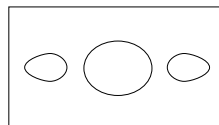


• 16:9 (FULL)



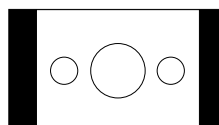
If you wish to see the picture in 16:9 full-screen.

• 16:9 (WIDE)



If you wish to see the picture in 16:9 wide-screen (Panscan).

• 4:3



If you wish to see the picture in 4:3 standard-screen.

Notes:

- When you switch the screen size for pictures from DVD, refer to page E32. Even if you change the screen size utilizing the steps on the right, the TV screen will have a screen size set at DVD (“Tv Screen”).
- When you connect it to a wide-screen TV, you can switch the screen size using the screen mode of the wide-screen TV.

- 5 Press [SETUP] twice to close the TV menu screen.

LANGUAGE CODE LIST

Enter the appropriate code number for the initial settings “Menu”, “Subtitle” and “Audio” language on page E31.

Language Name	Code	Language Name	Code	Language Name	Code	Language Name	Code
Abkhazian	1112	Fiji	1620	Lingala	2224	Singhalese	2919
Afar	1111	Finnish	1619	Lithuanian	2230	Slovak	2921
Afrikaans	1116	French	1628	Macedonian	2321	Slovenian	2922
Albanian	2927	Frisian	1635	Malagasy	2317	Somali	2925
Amharic	1123	Galician	1722	Malay	2329	Spanish	1529
Arabic	1128	Georgian	2111	Malayalam	2322	Sundanese	2931
Armenian	1835	German	1415	Maltese	2330	Swahili	2933
Assamese	1129	Greek	1522	Maori	2319	Swedish	2932
Aymara	1135	Greenlandic	2122	Marathi	2328	Tagalog	3022
Azerbaijani	1136	Guarani	1724	Moldavian	2325	Tajik	3017
Bashkir	1211	Gujarati	1731	Mongolian	2324	Tamil	3011
Basque	1531	Hausa	1811	Nauru	2411	Tatar	3030
Bengali; Bangla	1224	Hebrew	1933	Nepali	2415	Telugu	3015
Bhutani	1436	Hindi	1819	Norwegian	2425	Thai	3018
Bihari	1218	Hungarian	1831	Oriya	2528	Tibetan	1225
Breton	1228	Icelandic	1929	Panjabi	2611	Tigrinya	3019
Bulgarian	1217	Indonesian	1924	Pashto, Pushto	2629	Tonga	3025
Burmese	2335	Interlingua	1911	Persian	1611	Turkish	3028
Byelorussian	1215	Irish	1711	Polish	2622	Turkmen	3021
Cambodian	2123	Italian	1930	Portuguese	2630	Twi	3033
Catalan	1311	Japanese	2011	Quechua	2731	Ukrainian	3121
Chinese	3618	Javanese	2033	Rhaeto-Romance	2823	Urdu	3128
Corsican	1325	Kannada	2124	Romanian	2825	Uzbek	3136
Croatian	1828	Kashmiri	2129	Russian	2831	Vietnamese	3219
Czech	1329	Kazakh	2121	Samoan	2923	Volapük	3225
Danish	1411	Kirghiz	2135	Sanskrit	2911	Welsh	1335
Dutch	2422	Korean	2125	Scots Gaelic	1714	Wolof	3325
English	1524	Kurdish	2131	Serbian	2928	Xhosa	3418
Esperanto	1525	Laothian	2225	Serbo-Croatian	2918	Yiddish	2019
Estonian	1530	Latin	2211	Shona	2924	Yoruba	3525
Faroese	1625	Latvian, Lettish	2232	Sindhi	2914	Zulu	3631

CONNECTIONS TO OTHER EQUIPMENTS

Before Connecting

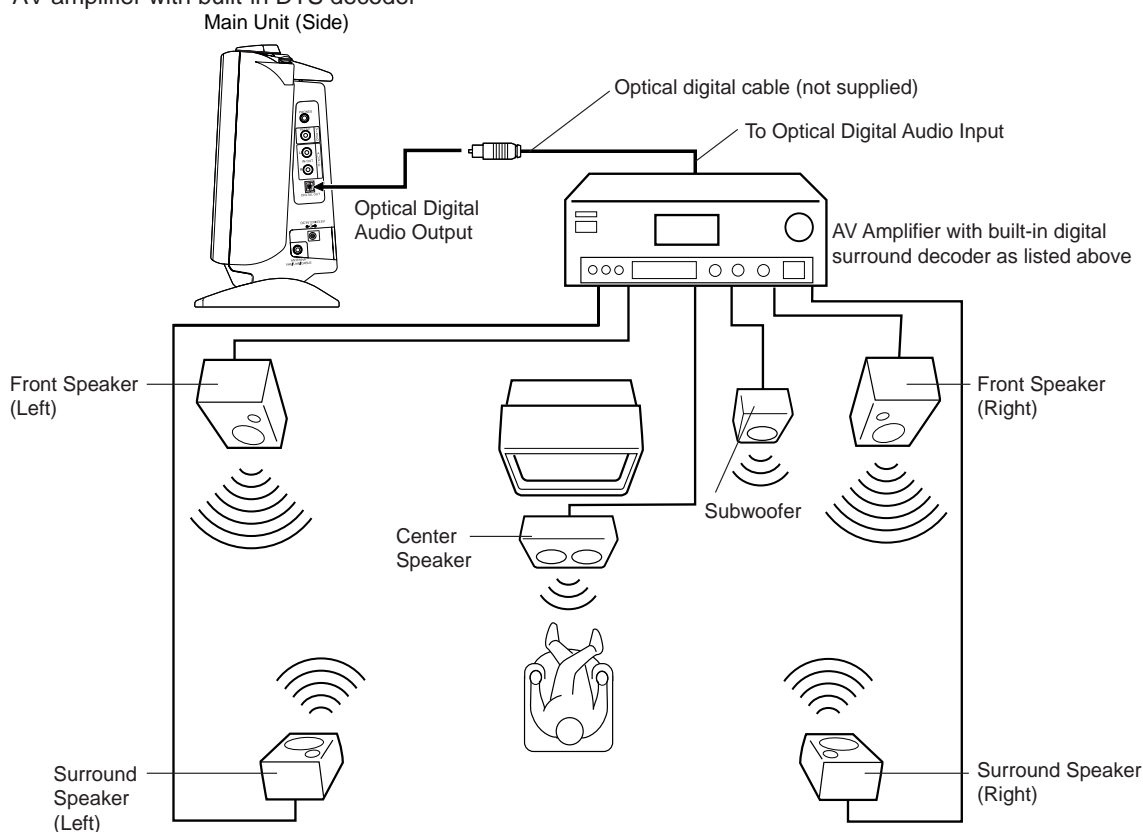
- Please also read the user's manual for any devices you wish to connect.
- When connecting, make sure to turn off the power to this unit and the device you are connecting, and unplug the power plug from the AC outlet. Connecting while the power is on could cause damage to the speaker(s).
- Please make sure that the connecting plugs are securely inserted in each device. If not fully inserted, it may cause noise.

Using an AV Amplifier with Built-in Digital Surround

If you are using an Amplifier with a built-in digital surround as follows, you can enjoy the various audio systems including Dolby Digital Surround audio that sounds just like the movie.

When connecting to the following items, connections are made as in the following diagram. (This is one example for connecting devices. Please refer to the amplifier's user's manual for details.)

- AV amplifier with built-in Dolby Digital decoder
- AV amplifier with built-in DTS decoder



* Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories. Confidential unpublished works. © 1992-1997 Dolby Laboratories, Inc. All rights reserved.

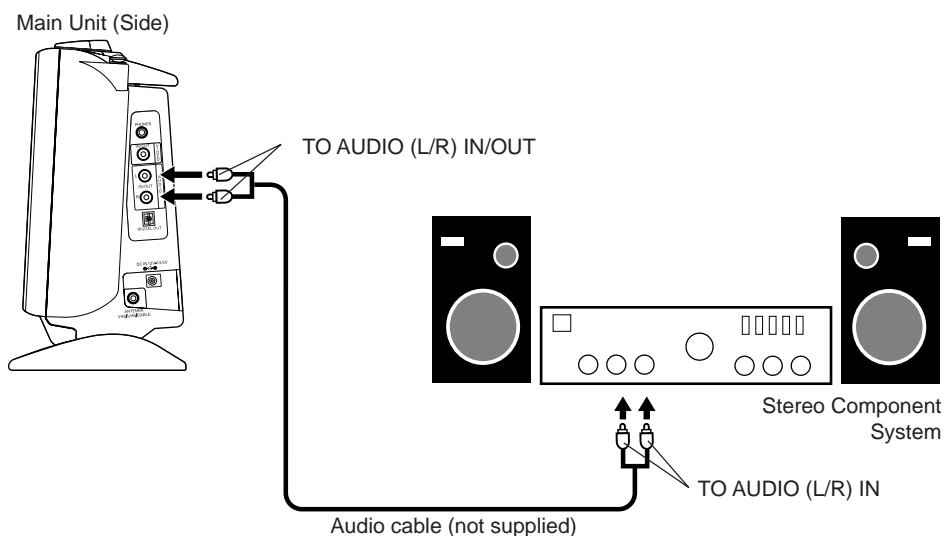
* "DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

Notes:

- When you make the connections above, do not set DOLBY DIGITAL to DOLBY DIGITAL, MPEG to MPEG to ON on the AV Amplifier. If you do, a loud noise will suddenly come out from the speakers, affecting your ears or causing the speakers to be damaged.
- When playing DTS-encoded CDs, only noise will be heard from the speakers or analogue stereo outputs.

Connecting to Audio Devices

By connecting to an audio device, you can enjoy a rich, full sound.

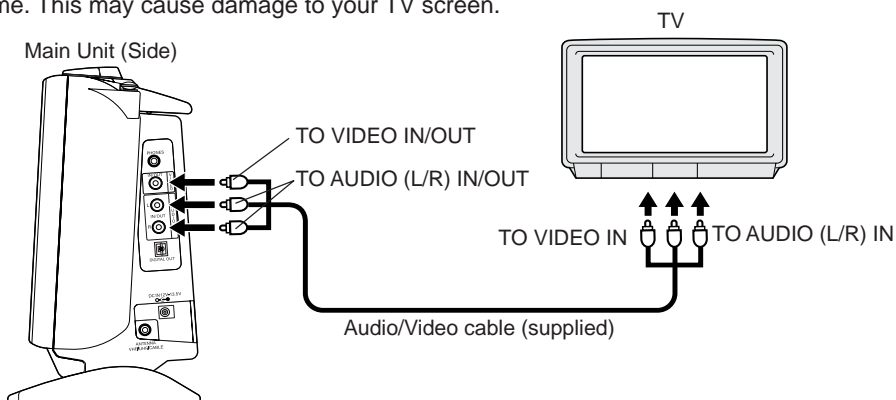


Connecting to another TV

You can enjoy a large screen by connecting to your TV.

Note:

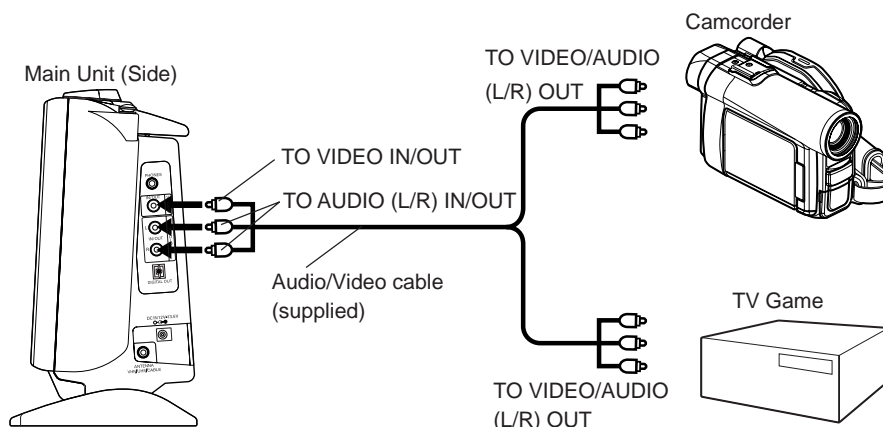
When using this unit, please do not leave the on-screen display image or a still DVD picture on the TV screen for a long time. This may cause damage to your TV screen.



Connecting to a Camcorder or TV Game


You can use this unit as a monitor by connecting it to a game machine or video integrated camera.






- Press the external input button to switch to the external input mode. "External" will be displayed on the screen.



TROUBLE SHOOTING GUIDE

If you have followed the instructions and are having difficulty operation the unit, locate the SYMPTOM in the left column below. Check the corresponding POSSIBLE CAUSE and CORRECTIVE ACTION columns to locate and remedy the problem.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION	PAGE
General			
No power.	<ul style="list-style-type: none"> The power cord is disconnected. 	<ul style="list-style-type: none"> Plug the power cord into the wall outlet securely. 	E12
The power is on, but the unit does not work.	<ul style="list-style-type: none"> Not in the mode you wish to operate. Various safety devices are in operation. 	<ul style="list-style-type: none"> Switch to the mode you wish to operate in. Unplug the power cord from the outlet once, then plug in again after several seconds to turn the power on. 	E11 E54
DVD/CD			
Disc tray does not open.	<ul style="list-style-type: none"> Child lock is set. 	<ul style="list-style-type: none"> Cancel the child lock 	E38
Even if you press [OPEN DISC], the disc tray doesn't open all the way.	<ul style="list-style-type: none"> In the interest of the safety of the LCD screen, the tray does not open wide. 	<ul style="list-style-type: none"> Pull the disc tray opened with [OPEN DISC] towards you. 	E15
No sound.	<ul style="list-style-type: none"> A convenient playback mode (fast playback, still playback, etc.) is in operation. 	<ul style="list-style-type: none"> Playing back normally. 	E17
The picture is wavy, flipping, etc.	<ul style="list-style-type: none"> Fast forward playback or fast reverse playback is in process. 	<ul style="list-style-type: none"> Fast forward playback or fast reverse playback may cause the image to be wavy, flip, etc. 	E17
Cannot operate still playback, fast playback, slow motion, repeat playback and program playback.	<ul style="list-style-type: none"> Playing back a disc with which these functions cannot be used. 	<ul style="list-style-type: none"> Depending on the disc, these functions may not be used. 	E17 E25 E26
4:3 (16:9) screen doesn't appear.	<ul style="list-style-type: none"> Size setting for the TV screen is not correct. 	<ul style="list-style-type: none"> Switch the TV screen size. 	E32
No screen display appears. Even though the title is selected, playback doesn't start.	<ul style="list-style-type: none"> "Display" is not set to "On" "Parental" is set. 	<ul style="list-style-type: none"> Set "Display" to "On". Check "Parental" settings. 	E33 E36
Cannot change the subtitle language or soundtrack language.	<ul style="list-style-type: none"> Multiple languages are not recorded on the disc. 	<ul style="list-style-type: none"> Depending on the disc, multiple languages may not be recorded. 	E31
Subtitle doesn't appear.	<ul style="list-style-type: none"> Subtitles are not recorded on the disc. The subtitle function is "OFF". 	<ul style="list-style-type: none"> Depending on the disc, subtitles may not be recorded. Select the desired subtitle. 	E28 E31
Cannot change the angle.	<ul style="list-style-type: none"> Multiple angles are not recorded on the disc. 	<ul style="list-style-type: none"> Depending on the disc, multiple angles may not be recorded. 	E27
"  " appears on the TV screen.	<ul style="list-style-type: none"> You are trying to do something prohibited. 	<ul style="list-style-type: none"> This indicates that the operation is prohibited for this unit. 	E15
"Incorrect Disc" is displayed.	<ul style="list-style-type: none"> Disc upside down. No data on the disc. 	<ul style="list-style-type: none"> Reverse the disc and place it again. Insert a disc with data on it. 	E15 E15
Cannot play MP3/WMA CD or Picture CD. ("Incorrect Disc" appears on TV screen.)	<ul style="list-style-type: none"> The first file playback is not unwanted one on a CD containing a mixture of MP3, WMA and JPEG files. "Select Files" setting is not correct. 	<ul style="list-style-type: none"> Select MP3/WMA file or JPEG file on the file list you want to play. Set "Select Files" setting correctly. 	E22 E34

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION	PAGE
TV			
No picture, no sound.	<ul style="list-style-type: none"> The screen is for the External input mode. 	<ul style="list-style-type: none"> Select the TV mode. 	E45
Poor picture	<ul style="list-style-type: none"> The 75 ohm coaxial cable is not connected. The station may have broadcast difficulties 	<ul style="list-style-type: none"> Connect the 75 ohm coaxial cable into the jack. Try another channel. 	E39 E45
Snow appears on the screen. 	<ul style="list-style-type: none"> The signal is being jammed by a vehicle boat, motorbike, train, power cable, neon signs, vacuum cleaner, hairdryer. 	<ul style="list-style-type: none"> Locate the antenna, antenna wires, or unit away from the source of jamming. 	—
Picture is blurry. (Ghosts) 	<ul style="list-style-type: none"> The antenna is not facing in the right orientation. The picture is affected by a backscattering of radio waves from mountains or buildings. 	<ul style="list-style-type: none"> Adjust the orientation of the antenna in the direction of the electric waves. Change the antenna position, height, orientation. 	— —
A pattern with color appears. 	<ul style="list-style-type: none"> The picture is affected by jamming from other devices, e.g. TV, radio, PC, Fax. 	<ul style="list-style-type: none"> Turn off the power of the jamming source. 	—
The color fades. 	<ul style="list-style-type: none"> The color or tint is not correctly adjusted. The station may have broadcast difficulties 	<ul style="list-style-type: none"> Adjust the color, tint. Try another channel. 	E48 E45
The screen looks snowy. (Snow noise) 	<ul style="list-style-type: none"> The antenna is not facing the right orientation. The antenna wire is either cut off or detached. The antenna is not facing the right orientation. 	<ul style="list-style-type: none"> Adjust the orientation of the antenna in the direction of the radio waves. Connect the antenna wire correctly. Adjust the orientation of the antenna in the direction of the radio waves. 	— E39 —
Remote control			
The remote control does not work properly.	<ul style="list-style-type: none"> The batteries in the remote control are installed incorrectly. The batteries in the remote control are weak. The remote control is not pointed at the remote sensor of the main unit. There is an obstacle in the path of the remote control and the main unit. The remote control is too far from the main unit. 	<ul style="list-style-type: none"> Check the battery polarity (+ or -). 	E10
		<ul style="list-style-type: none"> Replace the batteries. 	E10
		<ul style="list-style-type: none"> Point the remote control at the remote sensor of the unit (Within 30 degrees horizontally left or right from the light reception area.) 	E10
		<ul style="list-style-type: none"> Remove the obstacle. 	E10
		<ul style="list-style-type: none"> Operate the remote control within 20 feet (6 meters). 	E10


- This unit uses a micro computer. Malfunctions may occur when there are external noises or obstructing noises such as TV, radio, cellular phones, etc. If this unit doesn't operate normally, turn off the power once, unplug the power cord from the AC outlet, then insert it in the AC outlet again after several seconds to turn the power on and operate.
- As the LCD panel is manufactured with extremely precise technology, it has an effective pixel ratio of 99.99% or greater. Although 0.01% or fewer pixels may not light or always stay lit, this is not a malfunction.

SERVICING:

Should this product require service, refer to the SANYO AUDIO/VIDEO limited warranty.

If you do not have a convenient SANYO service station nearby, contact the SANYO dealer where you purchased the unit. Be sure to give the model number and explain the problem. The dealer will advise you how to obtain service.

SPECIFICATIONS

General	
Power requirements	AC 120V, 60Hz
Power consumption	36 Watts
Dimensions (W x H x D)	Approx. 11.8" x 9.0" x 5.0" (300 x 228 x 127 mm)
Weight	Approx. 6.2 lbs (2.8 kg)
Speaker	38 x 69 mm Oval (8 Ω) x2
Audio output power	1.5W + 1.5W
Operating conditions	5°C to 40°C (41°F to 104°F), Operating status: Horizontal
Input/Output	
DC input	DC IN12 V, 13.5 V 
Headphone	Matching impedance 32 Ω
Digital audio output (optical)	Optical connector
Audio/Video input/output	Video input: 1 Vp-p/75 Ω , Video output: 1 Vp-p/75 Ω Audio input: -8 dBm/50 k Ω , Audio output: -8 dBm/1 k Ω Audio output (DVD): -12 dBm/1 k Ω
DVD Video Player Section	
Color signal system	NTSC
Laser	Semiconductor laser, wavelength 650 nm/790 nm
Frequency response	DVD: 4 Hz – 22 kHz, CD: 4 Hz – 20 kHz
Signal to noise ratio	90 dB
Harmonic distortion	0.06%
Wow and flutter	Below Measurable Level
LCD TV Section	
Model	7 V
Screen size	154 (width) x 87 (height) x 177 (diagonal) mm
Display method	Transmission TFT color LCD panel
Drive method	TFT (thin layer transistor) active matrix drive method
Number of pixels	336,960 (horizontal 480 x vertical 234 x 3) (Effective pixel ratio 99.99% or greater)
Viewing angle	From above, 30 degrees, below 40 degrees, left 60 degrees, right 60 degrees
Light source used	Internal light (built-in fluorescent light)
Channel coverage	VHF: 2 – 13, UHF: 14 – 69, CATV: 1 – 125 (4A, A–W, W+1 – W+84, A-5 – A-1)
Antenna	75 ohms (VHF/UHF)

Accessories

Remote control with a CR2025 battery	1
Audio/Video cable	1
AC adaptor	1
AC cord	1
Antenna plug	1
Cigarette lighter adaptor	1

IMPORTANT INFORMATION

Because its products are subject to continuous improvement, SANYO reserves the right to modify product designs and specifications without notice and without incurring any obligation.

THE SANYO COMFORT WARRANTY AUDIO/VIDEO PRODUCTS

WARRANTY APPLICATION

New, unused Sanyo Audio/Video products purchased through a Sanyo authorized dealer in Canada are warranted against manufacturing defects in materials and workmanship for ONE YEAR from the date of purchase by the original retail purchaser. This warranty only applies in favor of the original retail purchaser of the warranted product.

SANYO CANADA INC.'S RESPONSIBILITY

During the warranty period, SANYO Canada Inc. will repair, or at our option, replace an Audio/Video product which shows evidence of a manufacturing defect in materials or workmanship.

Replacement PARTS are warranted for the remaining portion of the warranty period.

WHAT IS NOT COVERED

- (a) Products purchased outside Canada.
- (b) Products purchased in a used condition.
- (c) Problems due to product set-up and installation.
- (d) Adjustments that are outlined in the Operating Manual.
- (e) Accessory items including antenna, batteries, cassette tapes, cables, etc.
- (f) Damage in or due to transportation.
- (g) Damage due to improper maintenance, improper wiring, accident, abuse, misuse or negligence.
- (h) Damage caused by lightning and power surges.

ORIGINAL RETAIL PURCHASER'S RESPONSIBILITY

You, the original retail purchaser, must present your original, dated bill-of-sale together with this warranty to SANYO Canada Inc. or to an authorized Sanyo Service Depot when you make a claim under this Warranty.

You, the original retail purchaser, are responsible for any costs of TRANSPORTING the product to and from SANYO Canada Inc. or an authorized Sanyo Service Depot. You also are responsible for the cost of any MAINTENANCE necessary in respect of the product.

WARRANTY BECOMES VOID

This warranty becomes void if the product's serial numbers are altered or removed or if any repair to the product is made other than by SANYO Canada Inc. or by an authorized Sanyo Service Depot.

LIMITATIONS

- (a) SANYO Canada Inc. reserves the right to change or improve the design of the model of the product warranted hereunder without incurring any obligation to make any modifications to or to install any improvement in or on the product.
- (b) In no event shall SANYO Canada Inc. or any of its Authorized Dealers be liable for special or consequential damage arising from the use of this product.

STATUTORY WARRANTIES

The above provisions do not preclude the operation of any applicable provincial statute which in certain circumstances may not allow some of the limitations and exclusions described in this Warranty. Where any terms of this Warranty are prohibited by such a statute, they shall be deemed null and void but the remainder of this warranty shall remain in effect.

HOW TO OBTAIN WARRANTY SERVICE

Please contact the Sanyo Authorized Dealer from whom the product was purchased, or contact us directly at:

SANYO Canada Inc.

1-300 Applewood Cres.
Concord, Ont. L4K 5C7
(905) 760-9944
1-800-263-2244

<http://www.sanyocanada.com>

(R12)



J5D90401A

03/08 U

1AD6P1P1964--
(CA)

SANYO

SANYO Canada Inc.
Printed in Thailand