

SHARP

DVD MICRO SYSTEM

MODEL

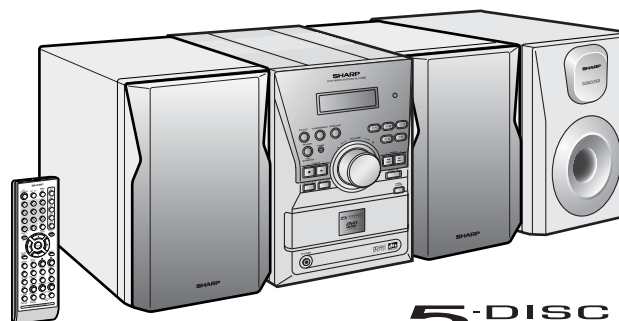
XL-DV60

OPERATION MANUAL



Thank you for purchasing this SHARP product.
To obtain the best performance from this product, please read this manual carefully. It will guide you in operating your SHARP product.

XL-DV60 DVD Micro System consisting of XL-DV60 (main unit), CP-DV60F (front speakers) and CP-DV60SW (subwoofer).



5-DISC
CHANGER

SPECIAL NOTES



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



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

Explanation of Graphical Symbols:



The 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 appliance.

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

CAUTION:

THIS PRODUCT IS A CLASS 1 LASER PRODUCT. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. AS THE LASER BEAM USED IN THIS PRODUCT IS HARMFUL TO THE EYES, DO NOT ATTEMPT TO DISASSEMBLE THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electrical Code that 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 cable entry as practical.

Note:

This equipment 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 in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment 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 equipment and receiver.
- Connect the equipment 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.

WARNING

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

FOR YOUR RECORDS

For your assistance in reporting this unit in case of loss or theft, please record below the model number and serial number which are located on the rear of the unit. Please retain this information.

Model number
Serial number
Date of purchase
Place of purchase

IMPORTANT SAFETY INSTRUCTIONS

XL-DV60

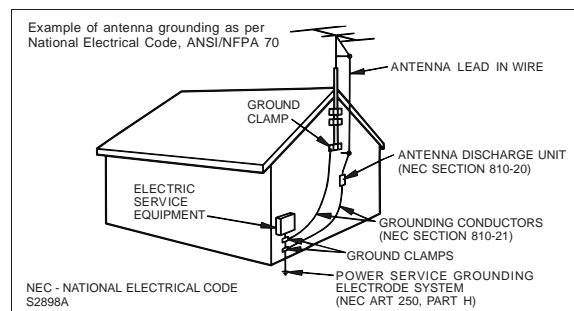
- 1 Read Instructions** - All the safety and operating instructions should be read before the product is operated.
- 2 Retain Instructions** - The safety and operating instructions should be retained for future reference.
- 3 Heed Warnings** - All warnings on the product and in the operating instructions should be adhered to.
- 4 Follow Instructions** - All operating and use instructions should be followed.
- 5 Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 6 Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- 7 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; and the like.
- 8 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.
- 9** A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to over-



- 10 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, and 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.
- 11 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.
- 12 Grounding or Polarization** - This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
Alternate Warnings - This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
- 13 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.
- 14 Protective Attachment Plug** - The product is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.

IMPORTANT SAFETY INSTRUCTIONS (continued)

- 15 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, 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.



- 16 Lightning** - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
- 17 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.
- 18 Overloading** - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

- 19 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.

- 20 Servicing** - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

- 21 Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) When 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 damaged in any way, and
- f) When the product exhibits a distinct change in performance - this indicates a need for service.

- 22 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.

- 23 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.

- 24 Wall or Ceiling Mounting** - The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

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

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

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

NOTES

- Licensed under one or more of U.S. Pat. 4,972,484, 5,214,678, 5,323,396, 5,530,655, 5,539,829, 5,544,247, 5,606,618, 5,610,985, 5,740,317, 5,777,992, 5,878,080 or 5,960,037.
- Supply of this product does not convey a license nor imply any right to distribute content created with this product in revenue-generating broadcast systems (terrestrial, satellite, cable and/or other distribution channels), revenue-generating streaming applications (via Internet, intranets and/or other networks), other revenue-generating content distribution systems (pay-audio or audio-on-demand applications and the like) or on revenue-generating physical media (compact discs, digital versatile discs, semiconductor chips, hard drives, memory cards and the like). An independent license for such use is required. For details, please visit <http://mp3licensing.com>.

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

ENERGY STAR® Program Information



Products that have earned the ENERGY STAR® are designed to protect the environment through superior energy efficiency.

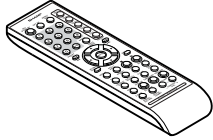
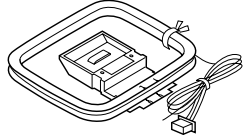
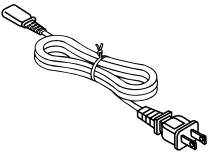
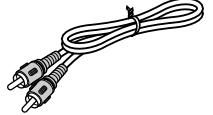
To comply with the ENERGY STAR® standards mentioned above, please cancel the demonstration mode, as described on page 18.

ENERGY STAR® is a U.S. registered mark.

Accessories

XL-DV60

Please confirm that the following accessories are included.

 Remote control × 1 (RRMCGA007SJSA)	 FM/AM loop antenna × 1 (QANTL0009SJZZ)
 AC power cord × 1 (QACCU0003SJ00)	 Video cable × 1 (QCNWGA004SJZZ)

Caution:

Do not use the supplied AC power cord for other equipment. Fire or electric shock may result.

Note:

Only the above accessories are included.

Icons used in this operation manual

Some functions may not be available depending on discs. The following icons indicate the discs that can be used in the section.

- DVD** ... Indicates DVDs.
- VCD** ... Indicates video CDs.
- CD** ... Indicates audio CDs.
- MP3** ... Indicates CD-R/RW with MP3 recording.
- JPEG** ... Indicates CD-R/RW with JPEG recording.

- Some operations may not be performed depending on discs even if they are described in this manual.
- During operation, "Q" may be displayed on the screen. This means that the operations described in this manual are prohibited by the disc.

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Copyright Information:

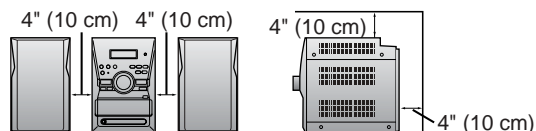
- Unauthorized copying, broadcast, public display, transmission, public performance and rental (regardless of whether or not such activities are for profit) of disc contents are prohibited by law.
- This system is equipped with copy protection technology that causes substantial degradation of images when the contents of a disc are copied to a video tape.

Precautions

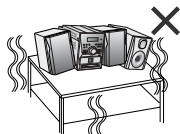
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■ General

- Please ensure that the equipment is positioned in a well-ventilated area and ensure that there is at least 4" (10 cm) of free space along the sides, top and back of the equipment.



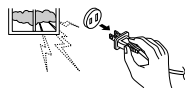
- Use the unit on a firm, level surface free from vibration.



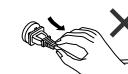
- Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic/electrical equipment (home computers, facsimiles, etc.) which generate electrical noise.



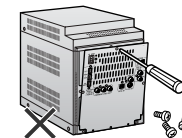
- Do not place anything on top of the unit.
- Do not expose the unit to moisture, to temperatures higher than 140°F (60°C) or to extremely low temperatures.
- If your system does not work properly, disconnect the AC power cord from the AC outlet. Plug the AC power cord back in, and then turn on your system.
- In case of an electrical storm, unplug the unit for safety.



- Hold the AC power plug by the head when removing it from the AC outlet, as pulling the cord can damage internal wires.



- Do not remove the outer cover, as this may result in electric shock. Refer internal service to your local SHARP service facility.



- This unit should only be used within the range of 41°F - 95°F (5°C - 35°C).

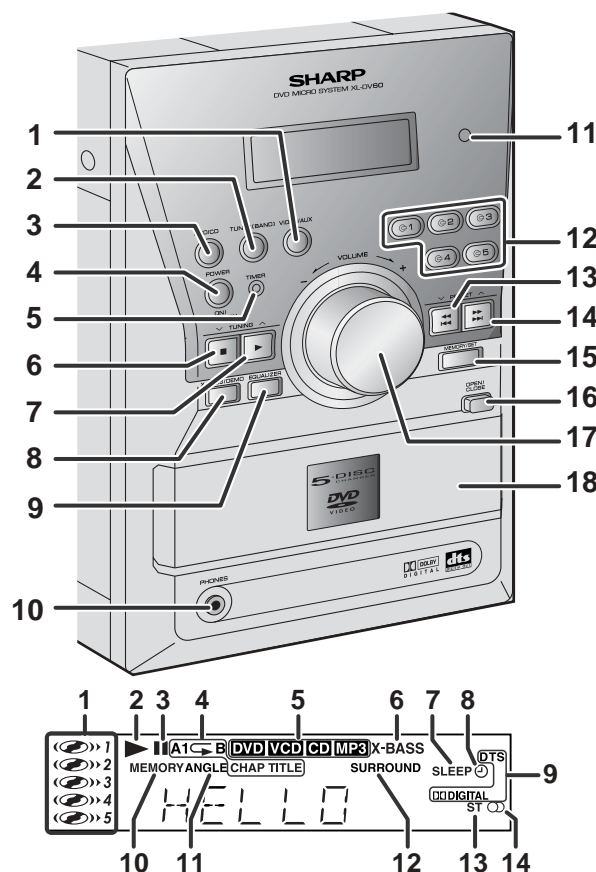
Warning:

The voltage used must be the same as that specified on this unit. Using this product with a higher voltage other than that which is specified is dangerous and may result in a fire or other type of accident causing damage. SHARP will not be held responsible for any damage resulting from use of this unit with a voltage other than that which is specified.

■ Volume control

The sound level at a given volume setting depends on speaker efficiency, location and various other factors. It is advisable to avoid exposure to high volume levels, which occurs while turning the unit on with the volume control setting up high, or while continually listening at high volumes.

Controls and indicators

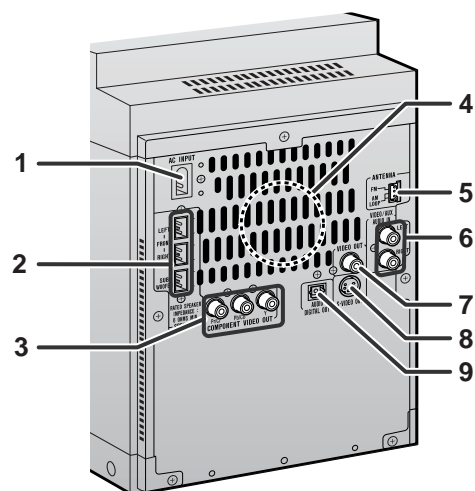


■ Front panel

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■ Display

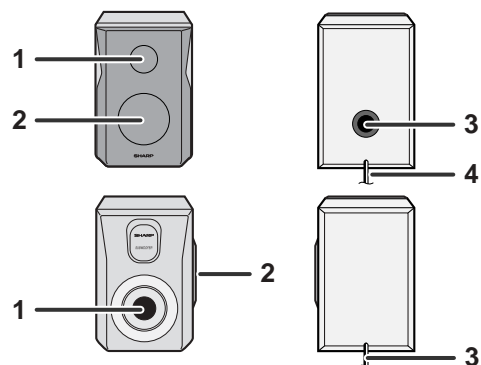
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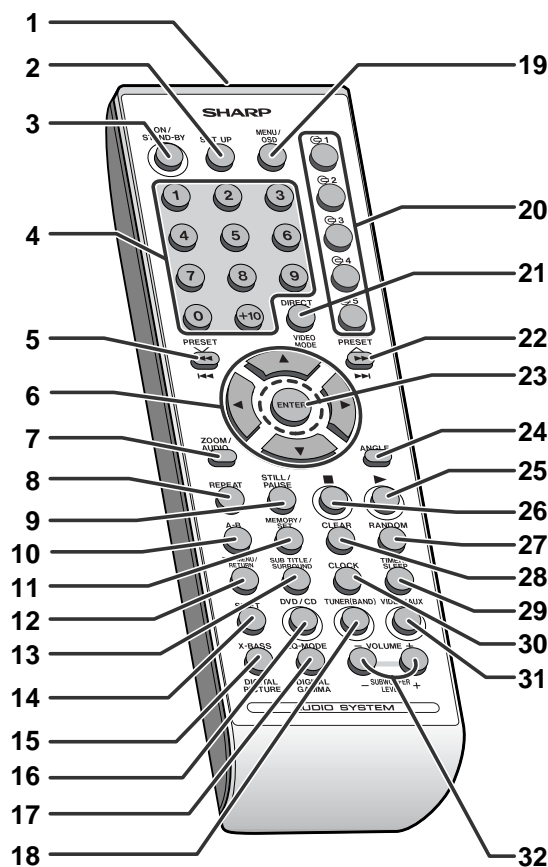
■ Front speaker

1. Semi Dome Tweeter
2. Woofer
3. Bass Reflex Duct
4. Speaker Wire

■ Subwoofer

1. Sub Duct Pipe
2. Subwoofer
3. Speaker Wire

Controls and indicators (continued)



■ Remote control

Reference page





1. Remote Control Transmitter	19
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31. Video/Auxiliary Button	51
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Description of discs

XL-DV60

■ Types of playable discs

The unit can play back discs bearing any of the following marks:

Disc type	Disc contents	Disc size
DVD Video Disc for NTSC system  Or DVD-R/DVD-RW/DVD+R/DVD+RW recorded in video mode (*1)	Audio and video (movies)	5" (12 cm) 3" (8 cm)
Video CD for NTSC system 	Audio and video (movies)	5" (12 cm) 3" (8 cm)
Audio CD  Or CDV (*2)	Audio	5" (12 cm) 3" (8 cm)
CD-R/CD-RW (*3) 	Audio and picture CD-R/CD-RW recorded in MP3 format (*4), JPEG format (*5)	5" (12 cm) 3" (8 cm)

(*1): Discs including DVD-R/DVD-RW/DVD+R/DVD+RW may not be played back due to properties and scratches on the disc, dirty optical pickup lens, etc.

(*2): Only the audio on the CDV can be played.

(*3): The CD-R/CD-RW may not be played back properly depending on the recording equipment or the disc.

(*4): If the sampling frequency is 44.1 or 48.1 kHz and the fixed bit rate is 128 kbps or higher, MPEG 1 Audio Layer 3 (MP3) files can be played. However, some of them may not be played depending on their conditions or formats.

(*5): JPEG or JPG picture discs also play on this unit. However, pictures may not be clear (depends on resolution and recording method).

- For unplayable discs, see page 13.

Copy Protection:

This unit supports Macrovision copy protection.

On DVD discs that include a copy protection code, if the contents of the DVD disc are copied using a VCR, the copy protection code prevents the videotape copy from playing normally.

Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, 4,819,098 and 4,907,093 licensed for limited viewing uses only.

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.

Description of discs (continued)

■ DVD-Video

A popular type of DVD disc of the same size as a CD, mainly containing video images.

Region number

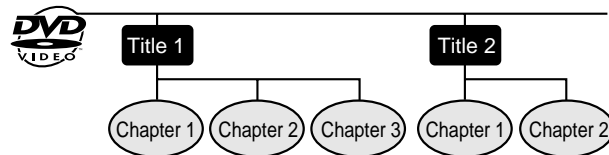
DVD discs are programmed with region numbers indicating countries in which they can be played. This system can play discs with region number "1" or "ALL".

Region number
(playable area number)



Title and chapter

DVD-Video discs are divided into "titles" and "chapters". If the disc has more than one movie on it, each movie is a separate "title". "Chapters" are subdivisions of titles.



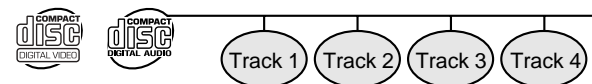
■ DVD-R/DVD-RW/DVD+R/DVD+RW

- You can play DVD-R/DVD-RW/DVD+R/DVD+RW discs recorded in the video mode.
- Before playing DVD-R/DVD-RW/DVD+R/DVD+RW discs with this unit, finalize them with the equipment used for recording.

■ Video CD/audio CD

Track

Video CD and audio CD are composed of "tracks". Tracks are equivalent to songs on a CD.



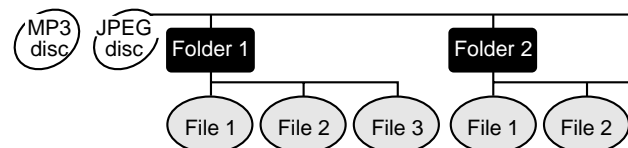
■ MP3/JPEG format on CD-R/CD-RW

An MP3 file is audio data compressed in the MPEG 1 audio layer 3 format. MP3 files have the extension ".mp3". (Files with the extension ".mp3" may not play, or noise may occur during playback if not recorded in the MP3 format.)

A JPEG file is still image data compressed in the JPEG (Joint Photographic Experts Group) format. JPEG files have the extension ".jpg".







Folder and file

MP3/JPEG discs consist of "folders" and "files".



■ Icons used on DVD discs

Check the icons of the DVD jacket before playing your discs.

Display	Description
Format recorded on the DVD   	Select a type according to the connected TV type.
Type of subtitles recorded Example:  <ol style="list-style-type: none"> 1. English 2. German 	Recorded subtitle languages. You can select a subtitle language.
Number of camera angles 	Number of angles recorded on the DVD. You can view scenes from different angles.
Number of audio tracks and audio recording systems Example:  <ol style="list-style-type: none"> 1: Original <English> (Dolby Digital 5.1 Surround) 2. German (Dolby Digital 2 ch) 	The number of audio tracks and audio recording systems are indicated. <ul style="list-style-type: none"> ● You can change the audio language. ● Audio and recording system vary depending on the DVD. Check them in the DVD's manual.

■ Discs that cannot be played

- DVDs without the region number "1" or "ALL".
- DVDs with SECAM system
- DVDs with MPEG sound
- DVD-ROM
- DVD-RAM
- DVD-Audio
- CDG
- Photo CD
- CD-ROM
- SACD
- Discs recorded in special formats, etc.

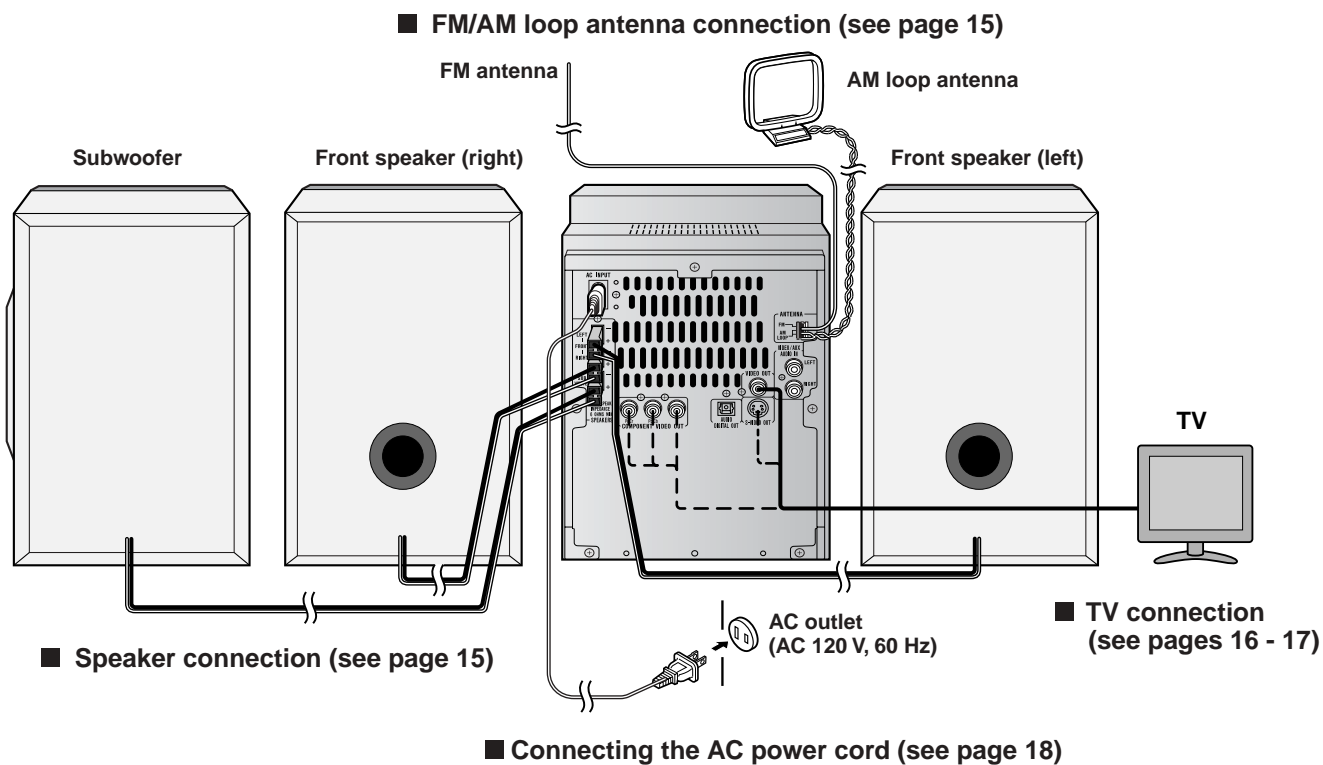
Notes:

- The discs above cannot be played at all, or no sound is heard although images appear on the screen or vice versa.
- Faulty playback may damage the speakers and can have an adverse effect on your hearing when played at high volume settings.
- You cannot play illegally produced discs.
- A disc with scratches or fingerprints may not play properly. Refer to "Care of discs" (page 54) and clean the disc.

System connections

Make sure to unplug the AC power cord before making any connections.

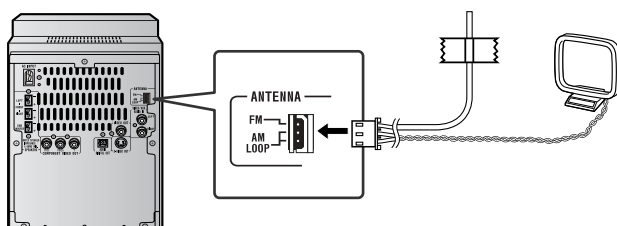
Preparation for Use



■ FM/AM loop antenna connection

Connect the FM/AM loop antenna to the ANTENNA jack.

Position the FM antenna wire and rotate the AM loop antenna for optimum reception. Place the AM loop antenna on a shelf, or attach it to a stand or a wall.

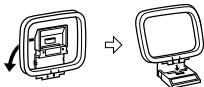


Notes:

- Placing the antenna on the stereo system or near the AC power cord may cause noise pickup. Place the antenna away from the stereo system for better reception.
- Do not connect the attached FM antenna to an external antenna as this may cause trouble.

Installing the AM loop antenna:

< Assembling >

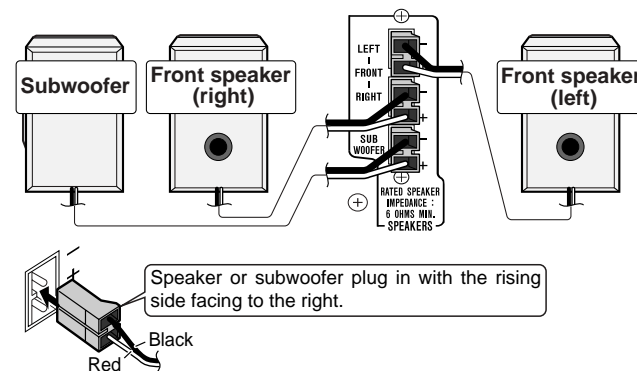


< Attaching to the wall >



■ Speaker connection

Insert the front speaker plugs (black) into the FRONT terminals. Insert the subwoofer plug (red) into the SUBWOOFER terminal.

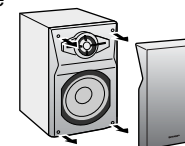


Caution:

- The supplied speakers are exclusively for the XL-DV60. Do not connect them to other equipment, and do not connect other speakers to the XL-DV60. It may cause malfunction.
- Use speakers with an impedance of 6 ohms or more, as lower impedance speakers can damage the unit.
- Do not mistake the right and the left channels. The right speaker is the one on the right side when you face the unit.
- Do not allow any objects to fall into or to be placed in the bass reflex ducts of the speakers.
- Do not stand or sit on the speakers. You may be injured.

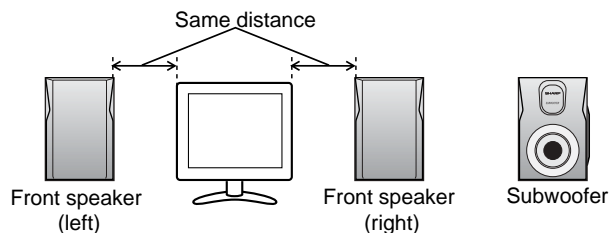
■ Front speaker grills are removable

Make sure nothing comes into contact with the speaker diaphragm when you remove the speaker grilles.



System connections (continued)

■ Placing the speaker system



Notes:

- Place the TV halfway between the front speakers.
- The bass sound from the subwoofer is omni-directional, however, it is recommended to place it as close as left and right speakers.
- Place the subwoofer on a sturdy and stable surface as it tends to vibrate while reproducing bass sounds.
- Keep the free space of at least 4" (10 cm) along the right side of the subwoofer.

■ Magnetically shielded speakers

The speakers are magnetically shielded.

Therefore, they do not affect the display even if you use them near the TV. However, some color variation may occur, depending on the type of TV used.

If color variation occurs...

Turn off the TV (from the power switch).
After 15 - 30 minutes, turn the TV on again.

If the color variation is still present...

Move the speakers further away from the TV.

If any kind of magnet or an electromagnet is placed too close to the TV and the system, irregular colors may appear on the TV screen.

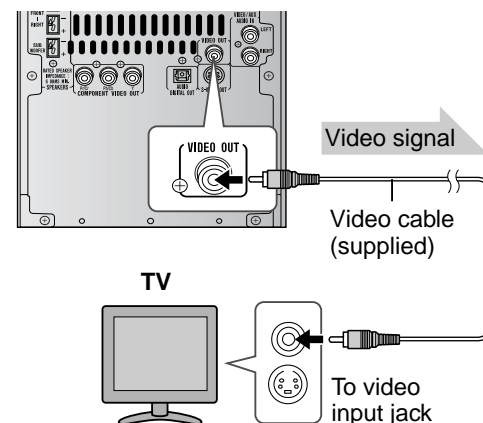
■ TV connection

Three types of jacks (VIDEO OUT, S-VIDEO OUT and COMPONENT VIDEO OUT) are available for connection of a TV and this unit. Connect according to your TV.

Connecting to a TV with a video input jack:

You can enjoy DVD images by connecting your TV and this unit with the supplied video cable.

Set the video mode to "Interlace" (default setting). For the procedure, refer to "Changing the video mode" on page 17.



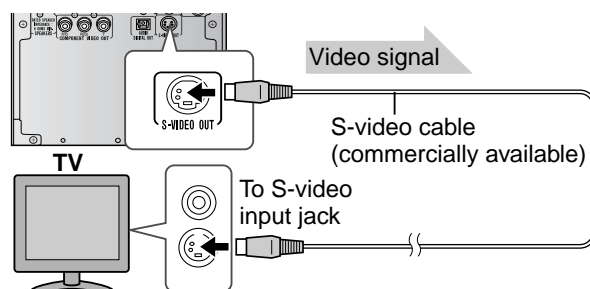
Notes:

- Change the TV input in accordance with the connected jack.
- Do not connect other equipment (VCR, etc.) between the TV and this unit. Pictures may be distorted.
- Refer to the operation manual of the equipment to be connected.
- Insert the plugs fully to avoid fuzzy pictures or noise.

Connecting to a TV with an S-video input jack:

If your TV is equipped with an S-video input jack, you can enjoy higher quality images by connecting it with an S-video cable (not supplied).

Set the video mode to "Interlace" (default setting). For the procedure, refer to "Changing the video mode".

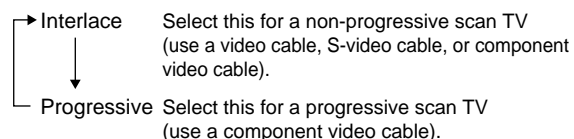
**Note:**

When the video and S-video cables are both connected, the images from the S-video input jack appears on your TV.

Changing the video mode:

- 1 Insert a DVD disc (steps 1 - 6, pages 22 - 23).
- 2 While in the stop mode, press the SHIFT button and DIRECT/VIDEO MODE button on the remote control.

Each time these buttons are pressed, the mode will change in the following order:

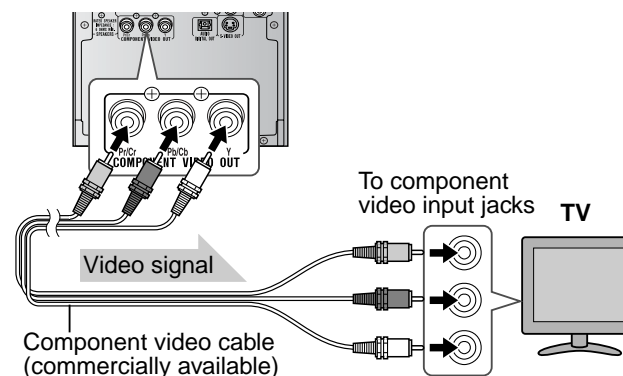
**Caution:**

To enjoy images on a TV, make sure to select the right items for the following four: video cable, TV's video input jack, and this unit's video output jack and video mode. Otherwise, images do not appear properly.

Connecting to a TV with component video input jacks:

If your TV is equipped with component video input jacks, purchase a component video cable to enjoy higher quality images.

For a progressive scan TV, set the video mode to "Progressive". Select "Interlace" for a non-progressive scan TV.

**Notes:**

- If your TV has different indications for the component video inputs (Y, B-Y and P-Y), connect jacks with its matching color.
- Some component video jacks designed for the high-vision system are not compatible with DVD. Do not connect this unit to those component video input jacks. (Images may appear distorted or may not appear due to the system difference.)

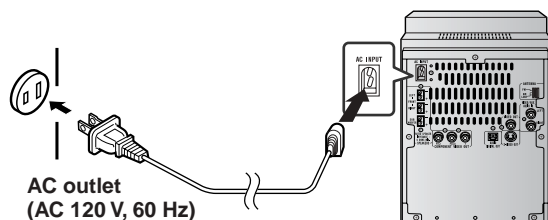
What is progressive scanning?

The conventional TV system displays 30 frames of still images per second to perform a series of movements (interlaced scanning). Whereas, progressive scanning displays one frame every 1/60th of a second (60 frames per second) to ensure less flickers and high-density images.

System connections (continued)

■ Connecting the AC power cord

After checking all the connections have been made correctly, connect the AC power cord to the AC power input jack, then plug the AC power cord of this unit into the AC outlet. If you plug in the unit first, the unit will enter the demonstration mode.

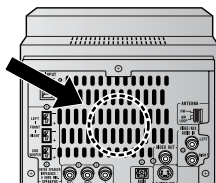


Notes:

- Never use a power cord other than the one supplied. Otherwise, a malfunction or an accident may occur.
- Unplug the AC power cord from the AC outlet if the unit will not be in use for a prolonged period of time.

Cooling fan:

A cooling fan is built into this unit for better heat radiation. Do not cover the opening in this section with any obstacles to avoid damage to the unit.



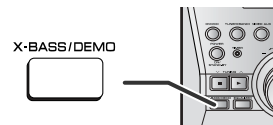
■ Demonstration mode

When you plug the unit in for the first time, the unit will enter the demonstration mode. You will see words scroll.



To cancel the demonstration mode:

When the unit is in the power stand-by mode (demonstration mode), press the X-BASS/DEMO button. The unit will enter the low power consumption mode.



To return to the demonstration mode:

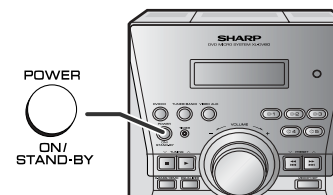
When the unit is in the power stand-by mode, press the X-BASS/DEMO button again.

Note:

When the power is on, the X-BASS/DEMO button can be used to select the extra bass mode.

■ To turn the power on

Press the ON/STAND-BY button to turn the power on.



After use:

Press the ON/STAND-BY button to enter the power stand-by mode.

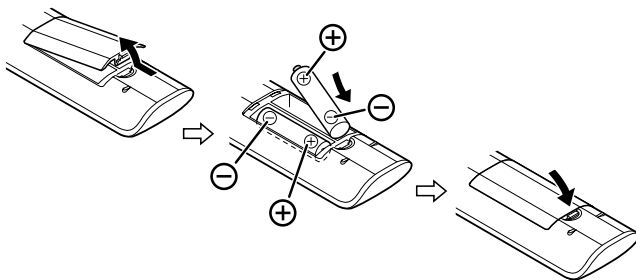
Remote control

XL-DV60

■ Battery installation

Use 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar).
Batteries are not included.

- 1 Remove the battery cover.
- 2 Insert the batteries according to the direction indicated in the battery compartment.
When inserting or removing the batteries, push them toward the ⊖ battery terminals.
- 3 Replace the cover.



Precautions for battery use:

- Replace all old batteries with new ones at the same time.
- Do not mix old and new batteries.
- Remove the batteries if the unit will not be used for long periods of time. This will prevent potential damage due to battery leakage.

Caution:

- Do not use rechargeable batteries (nickel-cadmium battery, etc.).
- Installing the batteries incorrectly may cause the unit to malfunction.

Battery removal:

Remove the battery cover. Push each battery toward the ⊖ battery terminal and take them out.

Notes concerning use:

- Replace the batteries if the operating distance is reduced or if the operation becomes erratic.
- Periodically clean the transmitter on the remote control and the sensor on the unit with a soft cloth.
- Exposing the sensor on the unit to strong light may interfere with operation. Change the lighting or the direction of the unit if this occurs.
- Keep the remote control away from moisture, heat, shock, and vibrations.

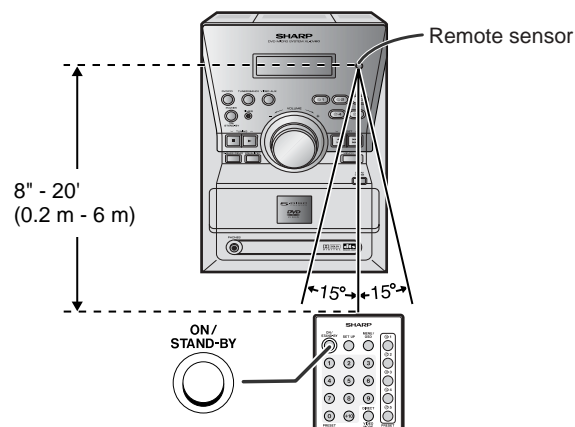
■ Test of the remote control

Check the remote control after checking all the connections (see pages 14 - 18).

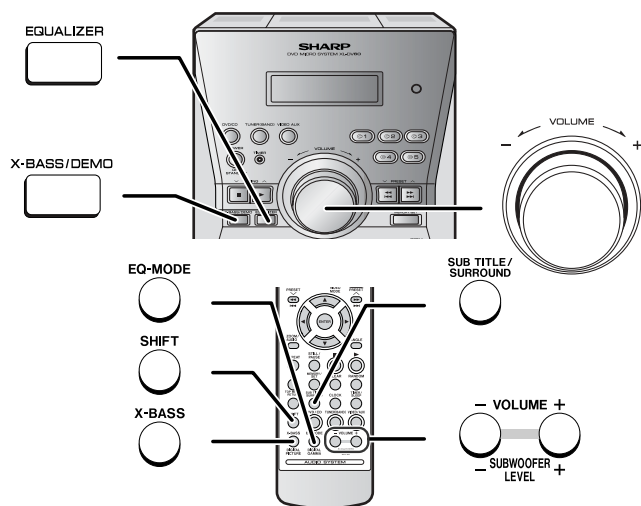
Point the remote control directly at the remote sensor on the unit.

The remote control can be used within the range shown below:

Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy music.



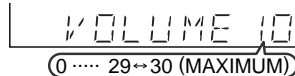
General control



■ Volume control

Main unit operation:

When the VOLUME control is turned clockwise, the volume will increase. When it is turned counterclockwise, the volume will decrease.

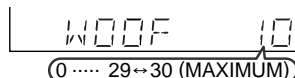


Remote control operation:

Press the VOLUME (+ or -) button to increase or decrease the volume.

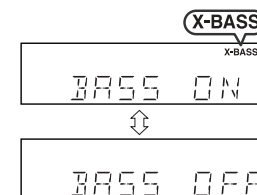
■ Subwoofer volume control

Press the SHIFT button on the remote control, and adjust the volume.



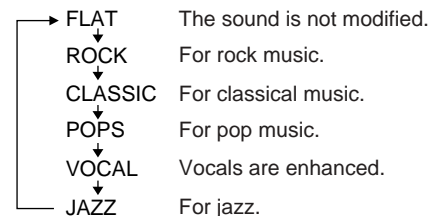
■ Bass control (X-BASS)

When the power is first turned on, the unit will enter the extra bass mode which emphasizes the bass frequencies, and "X-BASS" will appear. To cancel the extra bass mode, press the X-BASS/DEMO (X-BASS) button.



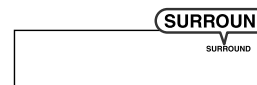
■ Equalizer

When the EQUALIZER (EQ-MODE) button is pressed, the current mode setting will be displayed. To change to a different mode, press the EQUALIZER (EQ-MODE) button repeatedly until the desired sound mode appears.



■ Surround

To enter the surround mode, press the SHIFT button and SUB TITLE/ SURROUND button on the remote control. Repeat this operation to exit.

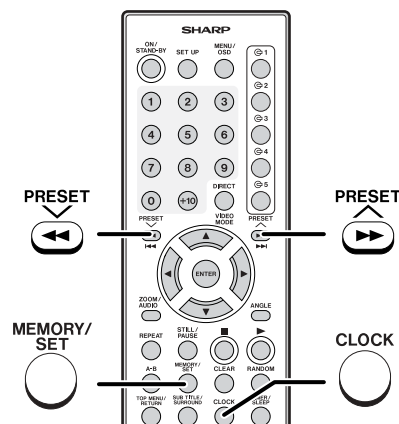


Note:

When the input source is "TUNER" or "AUX", the surround mode is not available.

Setting the clock

XL-DV60



In this example, the clock is set for the 12-hour (AM 12:00) display.

- 1 Press the **CLOCK** button and within 8 seconds, press the **MEMORY/SET** button.

[-CLOCK-] ⇒ [-AM 12:00-]

- 2 Within 30 seconds, press the **PRESET** (∨ or ∧) button to select 12-hour or 24-hour display and then press the **MEMORY/SET** button.

[-AM 12:00-] ⇒ [AM 12:00]

- "AM 12:00" → The 12-hour display will appear.
(AM 12:00 - PM 11:59)
- "0:00" → The 24-hour display will appear.
(0:00 - 23:59)

- 3 Within 30 seconds, press the **PRESET** (∨ or ∧) button to adjust the hour and then press the **MEMORY/SET** button.

[AM 10:00] ⇒ [AM 10:00]

Press the **PRESET** (∨ or ∧) button once to advance the time by 1 hour. Hold it down to advance continuously.

- 4 Within 30 seconds, press the **PRESET** (∨ or ∧) button to adjust the minutes and then press the **MEMORY/SET** button.

[AM 10:30] ⇒ [AM 10:30]

Press the **PRESET** (∨ or ∧) button once to advance the time by 1 minute. Hold it down to advance continuously.

To confirm the time display:

Press the **CLOCK** button.

The time display will appear for about 8 seconds.

[AM 10:00]

Note:

The "CLOCK" or time will flash at the push of the **CLOCK** button when the AC power supply is restored after a power failure or unplugging the unit.

Readjust the clock as follows.

To readjust the clock:

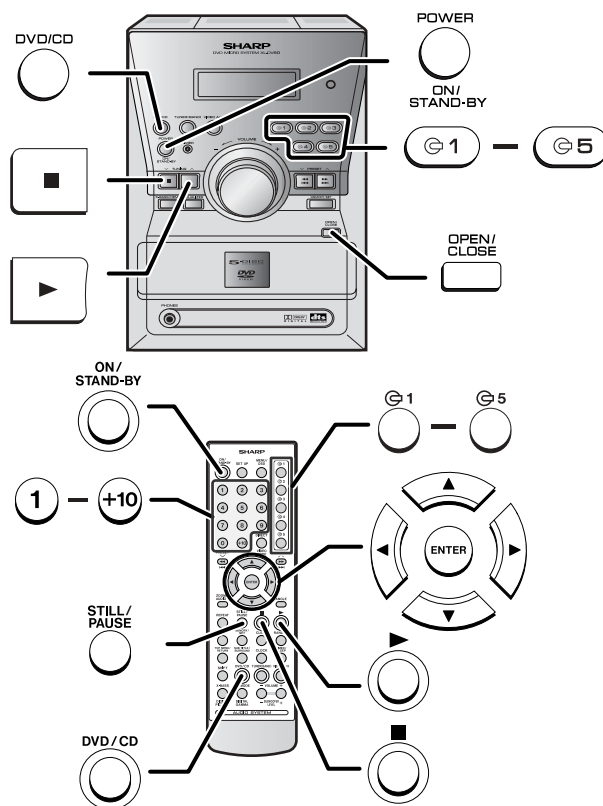
Perform "Setting the clock" from step 1. If the "CLOCK" is not flashing in step 1, step 2 (for selecting the 12-hour or 24-hour display) will be skipped.

To change the 12-hour or 24-hour display:

- 1 Clear all the programmed contents. [Refer to "Clearing all the memory (reset)" on page 53 for details.]
- 2 Perform "Setting the clock" from step 1.

Playing a disc

Turn on the TV, and switch the input to the "VIDEO 1" or "VIDEO 2", etc. accordingly.



DVD VCD CD MP3 JPEG

1 Press the ON/STAND-BY button to turn the power on.

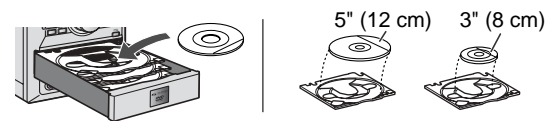
2 Press the DVD/CD button.

3 Press the OPEN/CLOSE button to open the disc compartment.
All trays open in tiers.



4 Place the disc on the disc tray 1, label side up.

Be sure to place 3" (8 cm) discs in the middle of the disc trays.

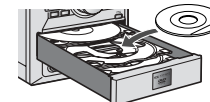


5 To place discs in the trays 2 - 5.

1. Slide in the tray with a disc toward the unit.



2. Place a disc in an empty tray.



6 Press the OPEN/CLOSE button to close the disc compartment.

Discs supporting auto start will start to play once you close the disc tray even if you do not press the ► (play) button.

7 If playback does not start, press the ► (play) button.

Chapter or track number Play indicator Selected disc type Playing time



The sound mode in use appears during DVD playback.

- When playing a DTS on this unit, sound is not heard from the speakers. To listen to the sound, select another audio output in the "To change the audio language (audio output)" on page 28.

When the menu appears on the TV screen:

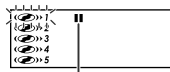
On DVD, select an item by using the cursor (▲, ▼, ◀ or ▶) button and press the ENTER button.

On video CD, select an item by using the direct number buttons.

To interrupt playback:

Press the STILL/PAUSE button on the remote control.

To resume playback from the same point, press the ► (play) button.



Pause indicator

To stop playback:

DVD:

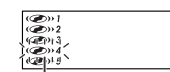
Press the ■ button twice.

VCD/CD/MP3/JPEG:

Press the ■ button.

To play from a specified disc:

1. Press the Ⓒ1 - Ⓒ5 button.
2. Press the ► (play) button.



Selected disc number

Note:

If a disc tray with no disc is selected, playback will not start, and only parentheses of the indicator "()" disappear.

To remove the discs:

1. In the stop mode, press the OPEN/CLOSE button.
- All trays open in tiers.



2. Remove the disc in the tray 1.
3. Slide in the tray 1 toward the unit. In the same way, remove discs in the trays 2 - 5.
4. After removing the discs, press the OPEN/CLOSE button again.



Note:

DVD discs cannot be removed in the resume play mode. Press the ■ button and then remove the disc.

Compatibility of the progressive scan TV

Some progressive scan TVs are not fully compatible with this product, which may cause image distortion. In this case, switch the video mode from "Progressive" to "Interlace" (see page 17).

Playing a disc (continued)

Caution:

- Do not place two discs in one disc tray.
- Do not play discs with special shapes (heart or octagon shaped) as it may cause malfunctions.



- Do not push the disc compartment while it is moving.
- If the power fails while the disc compartment is open, wait until the power is restored.
- If the disc compartment is stopped with force, the unit will not function. If this occurs, press the ON/STAND-BY button to enter the power stand-by mode and then turn the power on again.
- If a disc is damaged, dirty, or loaded upside down, the disc will skip or not play.
- When attempting to play discs with scratches or of a different region number, or unplayable or restricted (*1) discs, an error message will appear on the TV display and the disc will not play.
(*1) Viewing is prohibited on some DVDs according to the audience age.

Notes:

- When the unit is turned on, no operation is possible for 10 seconds as the unit is performing the initial setting.
- Stop positions may be recorded on some discs. When you play such a disc, playback stops there.
- During an operation, "⊗" may appear indicating that the operation is disabled by the disc.

■ To resume playback after stopping (resume play) DVD

You can resume playback from the point playback is stopped.

- 1 While the disc is playing, press the ■ button.

▶■ Pre-Stop

The system stores the point you stopped.

- 2 To restart play, press the ▶ (play) button.

▶ Play

Playback resumes from the point you left off.

To cancel resume play:

Press the ■ button again while "▶■ Pre-Stop" is lit.

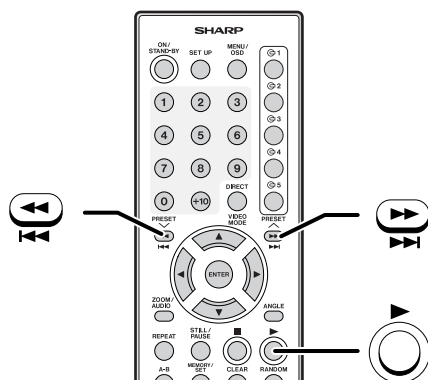
■ Stop

Notes:

- The resume play feature is disabled on some discs.
- Depending on the disc, playback may resume slightly before the position where it was stopped.

Basic operation

XL-DV60



■ To locate the beginning of a chapter/track (skip)

DVD VCD CD MP3 JPEG

You can skip the current chapter (track) to the next or previous.

While a disc is playing, press the ◀◀ or ▶▶ button.

▶▶ Next

- Press the ▶▶ button to skip to the next chapter (track).
- Press the ◀◀ button to skip to the beginning of the current chapter (track). Press the ◀◀ button again to skip to the beginning of the previous chapter (track).

Notes:

- Some discs do not display the chapter (track) and the skip feature is disabled.
- On a DVD, you cannot skip across titles.
- When operating video CD with the P.B.C. function, set the P.B.C. to off (see page 35).

■ Fast forward/Fast reverse (search)

DVD VCD CD MP3

You can search the desired point as you play the disc.

- 1 While a disc is playing, hold down the ◀◀ or ▶▶ button for 2 seconds or more.

▶▶ Fast Forward 2x

The scanning speed will change as follows at each press of the button.

The speed changed as follows on DVD/video CD/audio CD:



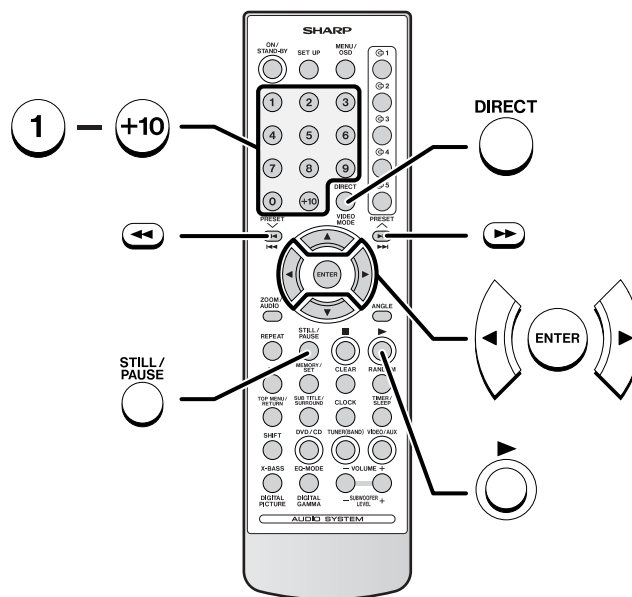
- The speed cannot be changed on MP3 discs.
- The disc is forwarded by the ▶▶ button and reversed by the ◀◀ button.

- 2 Press the ▶ (play) button to return to the normal playback.

Notes:

- On some discs, the search function is disabled.
- On DVD, search does not operate across titles.
- While searching on a DVD or video CD, the sound is not heard and the subtitles will not appear.
- When a search is performed during DVD playback, pictures may not be forwarded or reversed in the search speed specified in this manual, depending on the disc or the scene being played.

Basic operation (continued)



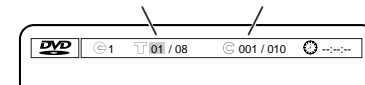
■ To start playback from the desired point (direct play) DVD

To select and play the desired title and chapter:

1 While in the stop or playback mode, press the DIRECT button.

2 Within 10 seconds, select the title or chapter by pressing the cursor (◀ or ▶) button and enter the title or chapter number by using the direct number buttons.

Title number Chapter number



If the title or chapter number is 2 digits or more, press "+10" and enter the number.

Example:

To select chapter 1, press "1".

To select chapter 12, press "+10" and "2".

To select chapter 22, press "+10", "+10" and "2".

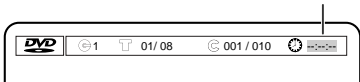
3 Within 10 seconds, press the ENTER button.

Notes:

- Direct play feature is disabled on some discs.
- Some discs may not display the chapter number.
- With DVDs, you can specify the desired point only in the current title and not in another title.

To play by specifying time (time search):

- 1 While a disc is playing, press the **DIRECT** button.
- 2 Within 10 seconds, select the time by pressing the cursor (◀ or ▶) button and specify the time by using the direct number buttons.



 - To specify 1 hour 23 minutes and 40 seconds, enter "012340".
 - If you enter the wrong number, start over from step 1.
- 3 Within 10 seconds, press the **ENTER** button.


Notes:

- Some discs cannot play from the specified point.
- Time search feature is disabled on some discs.

■ **Still picture/Frame advance** **DVD** **VCD**

You can freeze the image and advance frame by frame.

- 1 While a disc is playing, press the **STILL/PAUSE** button.



Each press of the STILL/PAUSE button advances the frame in the still mode.
- 2 Press the ▶ (play) button to return to the normal playback.

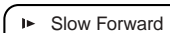
Note:


Still picture and frame advance features are disabled on some discs.

■ **Slow-motion play** **DVD** **VCD**

You can slow down the playback speed.

- 1 While a disc is playing, press the **STILL/PAUSE** button.
- 2 Hold down the ◀◀ or ▶▶ button for 2 seconds or more.



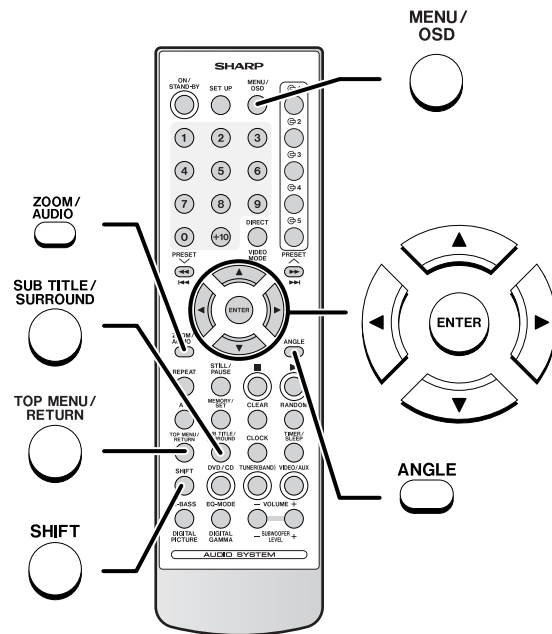

- 3 Press the ▶ (play) button to return to the normal playback.

Note:

On some discs, slow-motion play functions are disabled.

Useful operation

The subtitle language and the audio language you select during playback are reset each time you set this unit to the stand-by mode or change the disc. To keep your preferred languages, set them in the initial setting screen (see page 42).



■ To change the audio language (audio output)

DVD VCD CD MP3

During playback, you can change the audio language (audio output).

- 1 While a disc is playing, press the **SHIFT** button, and then press the **ZOOM/AUDIO** button.

Audio language information

Audio 1/3: AC-3 5.1 English

- 2 Repeat step 1 to select the desired audio number.

When playing DVD, the language changes as follows:

Audio 1/3: AC-3 5.1 English	1: Original <English> (Dolby Digital 5.1 ch Surround)
↓	
Audio 2/3: AC-3 2 English	2: English (Dolby Digital 2 ch Surround)
⋮	

When playing video CD, audio CD and MP3, the sound changes as follows:

→ Mono Left
↓
→ Mono Right
↓
→ Stereo

Notes:

- The audio language on some DVDs may not be changed.
- For audio language and audio system, refer to the manual of the disc.
- When playing a DTS on this unit, sound is not heard from the speakers. To listen to the sound, change the audio language. (Example: Dolby Digital 5.1-channel, Dolby Digital 2-channel, etc.) However, only the 2.1-channel sound can be reproduced. Alternatively, connect to a DTS digital surround amplifier, etc. (see page 51).

■ To change the subtitle language

You can change the subtitle language or hide subtitles during playback.


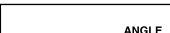
1 While the disc is playing, press the SUB TITLE/SURROUND button.	Subtitle 01/09: English
2 Within 3 seconds, press the SUB TITLE/SURROUND button repeatedly to select the desired subtitle language.	Subtitle 02/09: Spanish

Notes:

- Some DVDs prohibit changing the subtitle language.
- If no subtitles are recorded on the disc, "0" is displayed.
- It may take a little time to switch the subtitle language to the selected one.
- The subtitle cannot be hidden on some DVDs.

■ To change the angle

You can change the angle of view when playing a DVD video disc that contains scenes recorded from multiple angles.

When "ANGLE" is displayed in the upper right corner of the TV screen, press the ANGLE button repeatedly to select the desired angle number.	
TV screen	On the unit
	

Notes:

- Some DVDs prohibit changing the angle.
- Refer to the manual of the disc as the operation may vary depending on the disc.

■ To select a title, subtitle or audio language, etc. from the top menu or menu of the disc

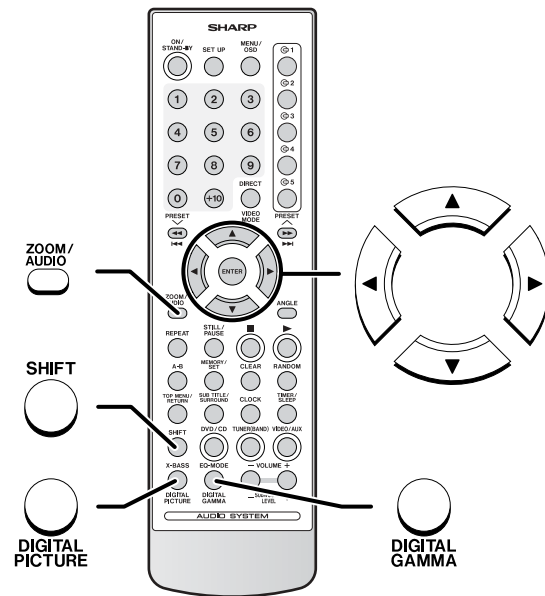
You can select a title, subtitle or audio language on your DVD if it has a disc menu.

1 While the disc is stopped or played, press the TOP MENU/RETURN button to display the top menu or press the MENU/OSD button to display the menu.	Example TOP MENU 1. Title 2. Subtitle 3. Audio language
2 Press the cursor (▲, ▼, ◀ or ▶) button to change the setting and press the ENTER button. You can also use the direct number buttons for some discs.	

Notes:

- The procedure shown here provides only general steps. The actual procedure for using the title menu depends on the disc you are using. See the disc jacket for details.
- If the disc you are using does not have a title menu, nothing appears on the screen.

Useful operation (continued)



■ To zoom in on an image (zoom) DVD VCD

You can magnify images during playback.

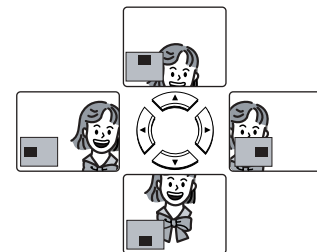
- 1 While a disc is playing, press the ZOOM/AUDIO button.

Zoom x 1.5

Each press of the ZOOM button cycles through the zoom settings as follows:

Zoom x 1.5 → Zoom x 2 → Zoom x 3 → Zoom off

- 2 To shift the view and display the desired part of a zoomed image, press the cursor (▲, ▼, ◀ or ▶) button repeatedly.







To return to normal view:

Press the ZOOM button. Repeat this to select "Zoom off".
When you cancel the zoom function, you cannot shift the view.

Notes:

- An image may become distorted when zoomed.
- Subtitles cannot be zoomed.
- For the part currently viewed, refer to the indication in the lower left section of the screen.





■ To brighten an image DVD VCD

- 1 During playback, press the **SHIFT** button, and then press the **DIGITAL GAMMA** button.  OFF 
- 2 Within 10 seconds, press the cursor (**◀** or **▶**) button to set the level.  ON 

Level	Setting	Level	Setting
OFF ▶▶▶	Normal image	ON ▶▶▶	Brighter
ON ▶▶▶	Slightly brighter	ON ▶▶▶▶	A lot brighter

To restore the original brightness:
In step 2, select "OFF".

■ To improve the image quality DVD VCD

- 1 During playback, press the **SHIFT** button, and then press the **DIGITAL PICTURE** button.  OFF 
- 2 Within 10 seconds, press the cursor (**◀** or **▶**) button to set the level.  ON 

Level	Setting	Level	Setting
OFF ▶▶▶	Normal	ON ▶▶▶	Clearer
ON ▶▶▶	Slightly clearer	ON ▶▶▶▶	A lot clearer

To restore the original image quality:
In step 2, select "OFF".

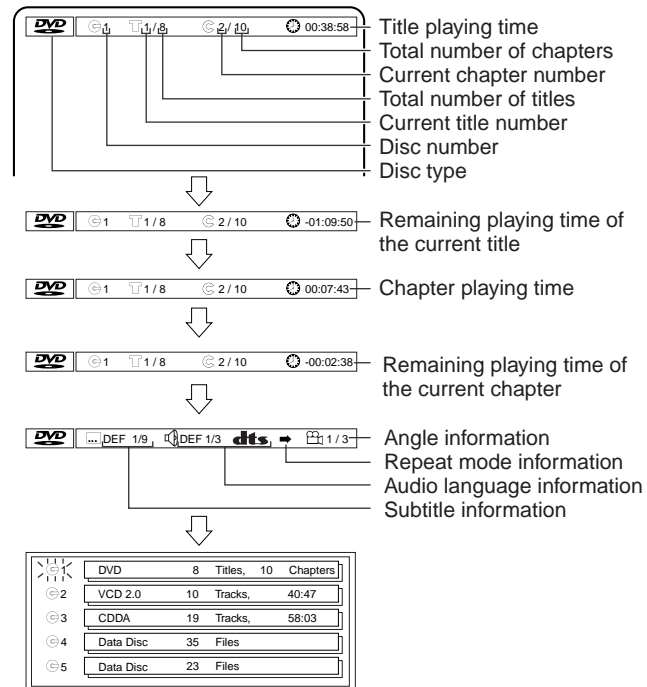
Useful operation (continued)

■ To change the display on TV screen

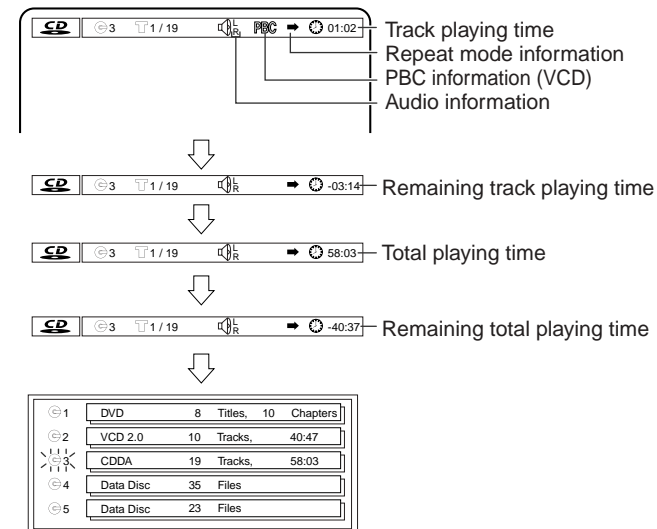
DVD VCD CD

You can display or hide the operation indicators on the TV screen. **While the disc is playing, press the SHIFT button, and then press the MENU/OSD button. (The display is changed at each operation of these two buttons.)**

When playing DVD, the display changes as follows:



When playing video CD and audio CD, the display changes as follows:



Note:

On video CD, total playing time or remaining total playing time appears when P.B.C is off (see page 35).

■ To play repeatedly (repeat play)

DVD VCD CD MP3 JPEG

You can play a chapter (track) or a title repeatedly by specifying it during playback.

1 While the disc is playing, press the REPEAT button.

TV screen

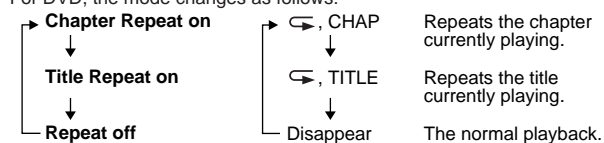
On the unit

Chapter Repeat on

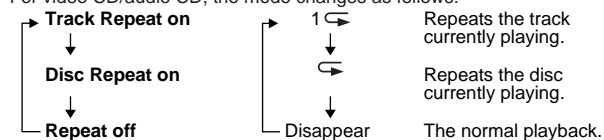
CHAP

Each time the button is pressed, the repeat play mode changes in the following order.

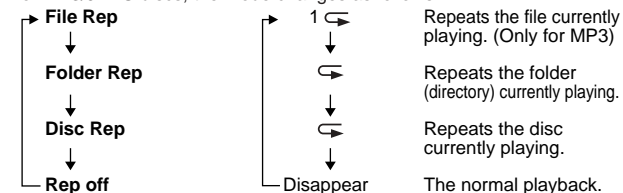
For DVD, the mode changes as follows:



For video CD/audio CD, the mode changes as follows:



For MP3/JPEG discs, the mode changes as follows:



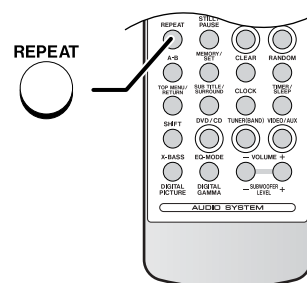
2 Select "Repeat off" by pressing the REPEAT button repeatedly to return to the normal playback.

Caution:

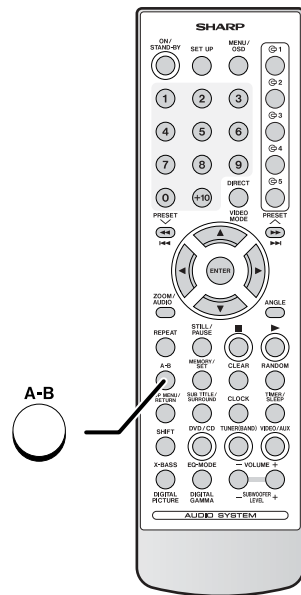
After performing repeat play, be sure to press the ■ button. Otherwise, the disc will play continuously.

Notes:

- Repeat play is not available on some discs.
- If you press another button during the repeat play, the playback may be canceled.
- Repeat play is not possible during random play.
- When operating video CD with the P.B.C. function, set the P.B.C. to off (see page 35).



Useful operation (continued)



■ To play the contents between the specified points repeatedly (A-B repeat) DVD VCD CD

You can play the desired portion repeatedly by specifying it during playback.

1 While the disc is playing, press the A-B button.

TV screen

On the unit

A-B Set A

A →

This registers the start point (A).

2 Press the A-B button again.

A-B Repeat on

A → B

A-B repeat starts from the start point (A) to the end point (B).

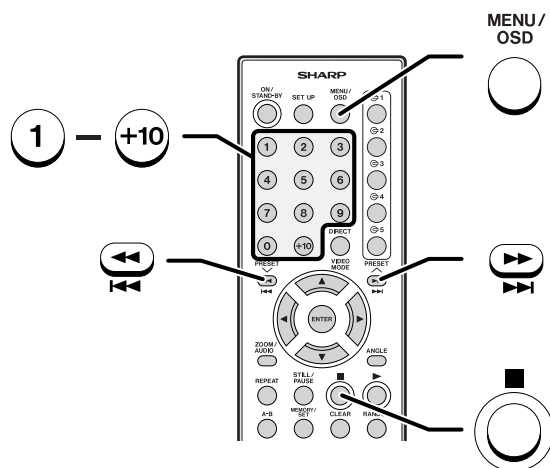
3 Press the A-B button to return to the normal playback.

Notes:

- A-B repeat play is disabled on some discs.
- Some scenes in DVD may not allow A-B repeat play.
- A-B repeat play for DVD is possible only within a title.
- A-B repeat play for video CD and audio CD are possible only within a track.

Playing a video CD

Playing a disc	22 - 24
To locate the beginning of a chapter/track (skip)	25
Fast forward/Fast reverse (search)	25
Still picture/Frame advance	27
Slow-motion play	27
To change the audio language (audio output)	28
To zoom in on an image (zoom)	30
To brighten an image	31
To improve the image quality	31
To change the display on TV screen	32
To play repeatedly (repeat play)	33
To play the contents between the specified points repeatedly (A-B repeat)	34
To play in random order (random play)	36
To start playback from the desired point (direct play)	36
To play in the desired order (programmed playback)	37



■ To play a video CD with P. B. C. (playback control) **VCD**

- 1 Load a video CD with P.B.C. The menu will appear on the TV and playback will be paused.

Example

1
2
3
- 2 Select the desired menu number by using the direct number buttons (1 - +10).

Example:
To select track 14, press "+10" and "4".

 - Playback starts.
 - After playback stops, the menu will reappear, then select the menu number you want to play.

To scroll the menu screen (menu screen with more than 1 page):

Press the ◀◀ or ▶▶ button.

To stop playback:

Press the ■ button.

To play without activating the playback control function:

You can play a video CD with P.B.C. without activating the playback control function.

In this case, the menu screen will not appear, and the disc will play in the same way as a video CD without P.B.C.

While in the stop mode, press the

MENU/OSD button to cancel the P.B.C. mode.

Playback starts.

Each time you press the button, the setting switches on and off.

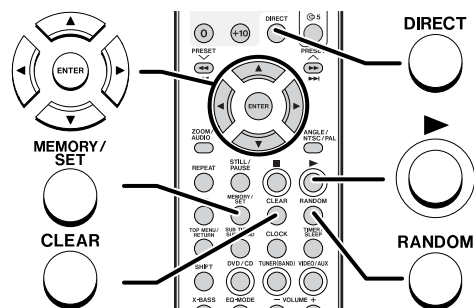
▶ Play PBC off

Note:

Some video CDs with P.B.C. cannot be played back when the P.B.C. mode is off.

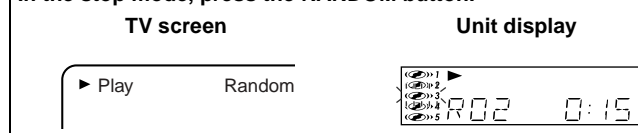
XL-DV60

Playing a disc	22 - 24
To locate the beginning of a chapter/track (skip)	25
Fast forward/Fast reverse (search)	25
To change the audio language (audio output)	28
To change the display on TV screen	32
To play repeatedly (repeat play)	33
To play the contents between the specified points repeatedly (A-B repeat)	34



VCD CD MP3

In the stop mode, press the RANDOM button.



Notes:

- On some discs, this function cannot be used.
- You cannot set the random play while in the playback or pause mode.
- When operating video CD with the P.B.C. function, set the P.B.C. to off (see page 35).

To select and play the desired track: **VCD** **CD** **MP3** **JPEG**

1 2 3
 4 5 6
 7 8 9
 0 +10

Select: 14

1 2 3 4 5

Example:

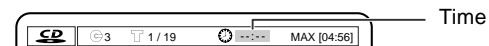
To select track 14, press "+10" and "4".

To select track 24, press "+10", "+10" and "4".

- Direct play feature is disabled on some discs.
- When operating video CD with the P.B.C. function, set the P.B.C. to off (see page 35).

You can play tracks from the desired time point during playback.

1 While the disc is playing, press the **DIRECT** button.



2 Specify the time with the direct number buttons.

- Enter minutes and seconds.
- To specify 1 hour 23 minutes and 40 seconds, enter "8340".
- If you enter the wrong number, start over from step 1.

3 Within 10 seconds, press the ENTER button.

Time search feature is disabled on some discs.

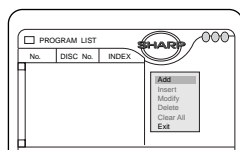
■ To play in the desired order (programmed playback) **VCD CD MP3 JPEG**

You can play back the desired tracks in the sequence you want.
Maximum of 40 tracks can be programmed.

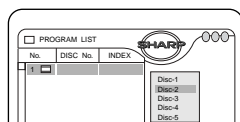
1 In the stop mode, press the MEMORY/SET button.

Information on all loaded discs is read, and then the programming screen appears.

2 Press the cursor (▲ or ▼) button to select "Add" and press the ENTER button.



3 Press the cursor (▲ or ▼) button to select a disc number and press the ENTER button.

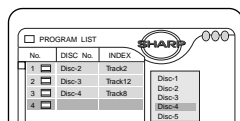


4 Press the cursor (▲ or ▼) button to select a track number and press the ENTER button.

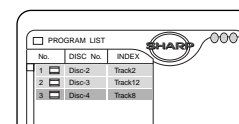


5 Repeat steps 3 - 4 for other tracks. Up to 40 tracks can be programmed.

If you make a mistake, the programmed tracks can be cleared by pressing the CLEAR button.



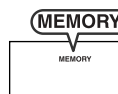
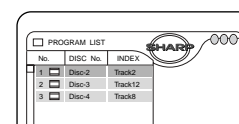
6 Press the cursor (◀) button to finish programming.



7 Use the cursor (▲ or ▼) button to select a track to start with, and press the ► (play) button.

- Playback starts from the selected track and ends after the last track in the program.

- "MEMORY" lights up on the main unit during programmed play.



- Programmed tracks are stored until a disc is removed or you turn the power off.

To change the programmed contents:

- 1 While stopped, press the MEMORY/SET button to show the programming screen.
- 2 Use the cursor (▲ or ▼) button to select an item and then press the cursor (►) button.
- 3 Use the cursor (▲ or ▼) button to select the desired command and then press the ENTER button.

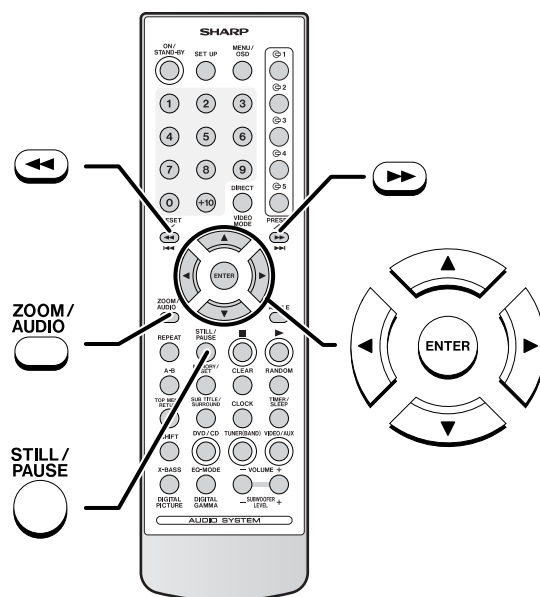
- "Add" Adds a track to the program.
- "Insert" Inserts a track between programmed tracks. The track is inserted above (before) the selected track.
- "Modify" Modifies the track.
- "Delete" Deletes the selected track.
- "Clear All" Deletes the program.
- "Exit" Turn off the programming screen.

Note:

On some discs, programmed play does not work.

Playing an MP3 and JPEG disc

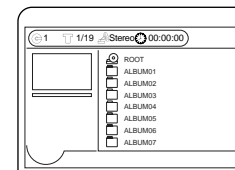
Playing a disc	22 - 24
To locate the beginning of a chapter/track (skip)	25
Fast forward/Fast reverse (search)	25
To change the audio language (audio output)	28
To play repeatedly (repeat play)	33
To play in random order (random play)	36
To start playback from the desired point (direct play)	36


MP3 JPEG

You can play CD-R/RW recorded in the MP3 and JPEG formats.

Load a disc containing MP3 and JPEG files.

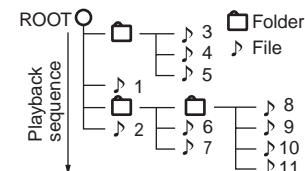
- ... Folder
- ... MP3 File
- ... JPEG File



A menu screen appears and playback starts automatically.

Example of playback sequence

- Playback is performed in the order of 1 to 11 in this example.
- Files on some discs cannot be played in order.



When playing JPEG files

- Playback skips to the next file approx. every 5 seconds.
- To return to the menu screen, press the button.

Selecting a folder/file on the menu screen:

In the stop mode, press the cursor (or) button to select a folder/file and press the ENTER button.

Caution:

If you convert MP3 data to "audio CD" data when recording on a CD-R/RW, play it as an audio CD. The MP3 operation cannot be performed.

Note:

Up to 20 characters can be displayed for a folder name and a file name. Underlines, asterisks, and spaces may not be displayed.

■ Zoom function JPEG

1 While playback, press the ZOOM/AUDIO button. Zoom on

2 Hold down the ◀ or ▶ button for 2 seconds or more. Zoom 150 Pct

Use the ◀ or ▶ button to switch the zoom setting as follows:

Zoom 025 Pct ↔ Zoom 050 Pct ↔ Zoom 100 Pct ↔ Zoom 150 Pct ↔ Zoom 200 Pct

3 To shift the view and display the desired part of a zoomed image, press the cursor (▲, ▼, ◀ or ▶) button repeatedly.

Press the ▲ button. Press the ▶ button.

Press the ◀ button. Press the ▼ button.

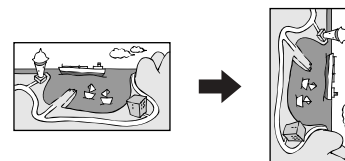
To return to normal view:
Press the ZOOM/AUDIO button again, "Zoom off" will show on the screen.

■ Rotating a picture JPEG

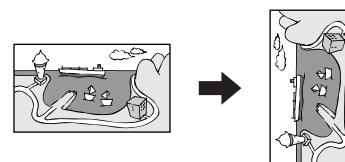
After pressing the STILL/PAUSE button, press the cursor (▲, ▼, ◀ or ▶) button.

The image rotates as shown below.

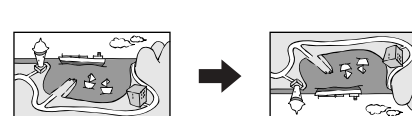
▶ button : 90° rotation in a clockwise direction.



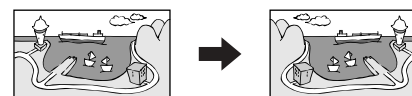
◀ button : 90° rotation in a counterclockwise direction.



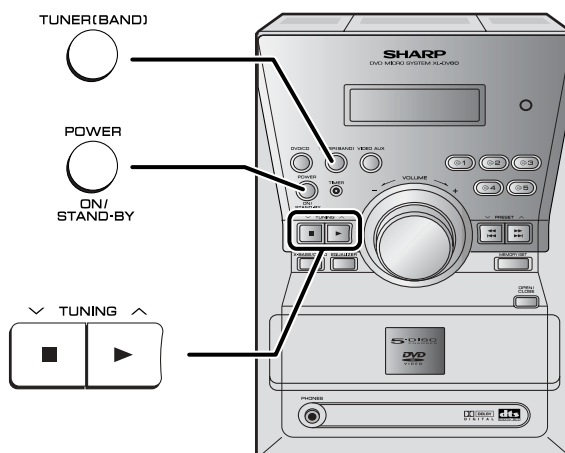
▲ button : Vertical mirror image.



▼ button : Horizontal mirror image.



Listening to the radio



■ Tuning

- 1** Press the ON/STAND-BY button to turn the power on.
- 2** Press the TUNER (BAND) button repeatedly to select the desired frequency band (FM or AM).
- 3** Press the TUNING (◀ or ▶) button to tune in to the desired station.

Manual tuning:

Press the TUNING button as many times as required to tune in to the desired station.

Auto tuning:

When the TUNING button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.

Notes:

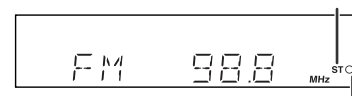
- When radio interference occurs, auto scan tuning may stop automatically at that point.
- Auto scan tuning will skip weak signal stations.
- To stop the auto tuning, press the TUNING button again.

To receive an FM stereo transmission:

Press the TUNER (BAND) button to display the "ST" indicator.

- "∞" will appear when an FM broadcast is in stereo.
- If the FM reception is weak, press the TUNER (BAND) button to extinguish the "ST" indicator. The reception changes to monaural, and the sound becomes clearer.

FM stereo mode indicator



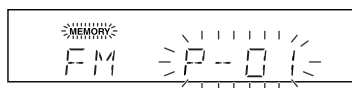
FM stereo receiving indicator

■ Memorizing a station

You can store 40 AM and FM stations in memory and recall them at the push of a button. (Preset tuning)

1 Perform steps 1 - 3 in "Tuning" on page 40.

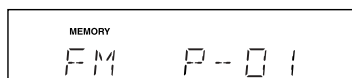
2 Press the MEMORY/SET button to enter the preset tuning saving mode.



3 Within 30 seconds, press the PRESET (∨ or ∧) button to select the preset channel number.

Store the stations in memory, in order, starting with preset channel 1.

4 Within 30 seconds, press the MEMORY/SET button to store that station in memory.



If the "MEMORY" and preset number indicators go out before the station is memorized, repeat the operation from step 2.

5 Repeat steps 1 - 4 to set other stations, or to change a preset station.

When a new station is stored in memory, the station previously memorized will be erased.

Note:

The backup function protects the memorized stations for a few hours should there be a power failure or the AC power cord get disconnected.

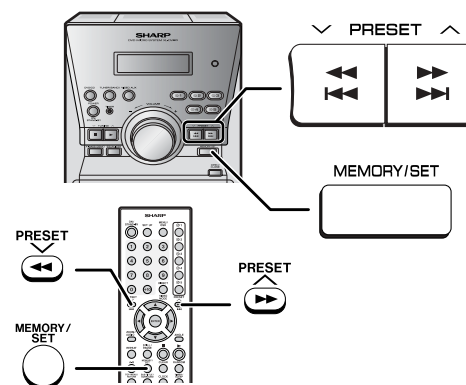
■ To recall a memorized station

Press the PRESET (∨ or ∧) button for less than 0.5 seconds to select the desired station.

■ To scan the preset stations

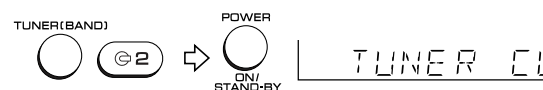
The stations saved in memory can be scanned automatically. (Preset memory scan)

- 1 Press the PRESET (∨ or ∧) button for more than 0.5 seconds. The preset number will flash and the programmed stations will be tuned in sequentially, for 5 seconds each.
- 2 Press the PRESET (∨ or ∧) button again when the desired station is located.

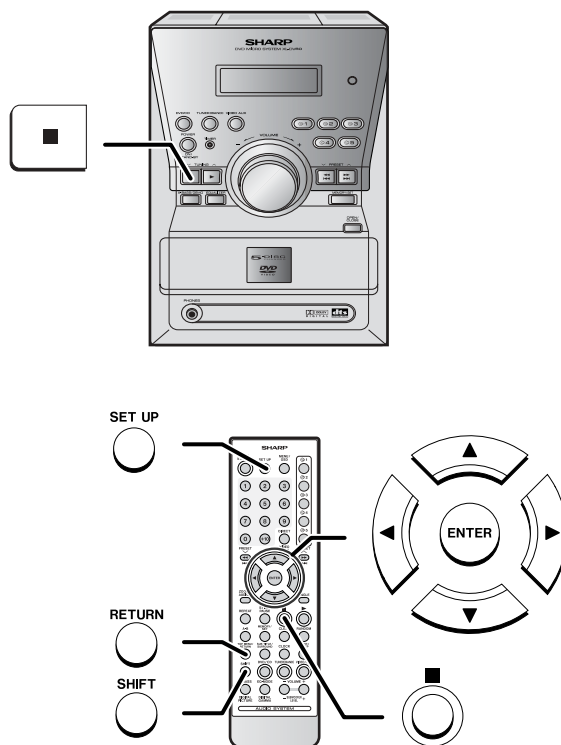


■ To erase entire preset memory

- 1 Press the ON/STAND-BY button to enter the stand-by mode.
- 2 While pressing down the TUNER(BAND) button and the G2 button, press the ON/STAND-BY button until "TUNER CL" appears.

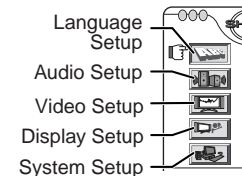


Changing the initial setting of DVD



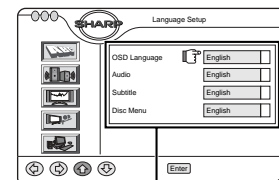
1 After pressing the ■ button, press the SET UP button.

2 Press the cursor (▲ or ▼) button to select the main menu and press the ENTER button.



3 Press the cursor (▲ or ▼) button to select the sub-menu and press the ENTER button.

To return to the previous display, press the cursor (◀) button, or press the SHIFT button and then the RETURN button.



Submenu

4 Press the cursor (▲ or ▼) button to change the setting and press the ENTER button.


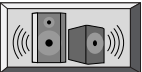
- To return to the previous display, press the cursor (◀) button, or press the SHIFT button and then the RETURN button.
- To change other settings, begin from step 2.

5 Press the SET UP button.


The new setting is memorized.


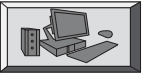
Note:

Settings are retained even if the unit is set to the stand-by mode.

Setting	Selectable parameters (* indicates initial settings.)		Description	Reference page
Language Setup 	OSD Language	English* Français Español	Selects the initial or playback setting language.	P. 46
	Audio	English* French ...	Select a language to play.	P. 46
	Subtitle	English* French ...	Selects the subtitle displayed on the TV screen.	P. 46
	Disc menu	English* French ...	Selects the disc menu language.	P. 46
Audio Setup 	Digital output	BitStream* LPCM	Select a type of signal sent from the digital audio output jack.	P. 51
	LPCM output	48 kHz 96 kHz*	PCM sound signals recorded in 96 kHz are converted to 48 kHz.	—
	Analog output	Surround 2.1Ch*	Select a type of signal sent to the speaker. Surround: 2 channel (video CD/audio CD) or 5.1 channel (DVD) sound are converted to 2.1 channel sound (virtual speaker surround sound). 2.1ch: 2 channel (video CD/audio CD) or 5.1 channel (DVD) sound are converted to 2.1 channel sound (with the subwoofer sound increased).	—
	Compression	On Off*	Set to on to enjoy the realistic sound as recorded on the disc. On: Realistic sound is produced as recorded on DVD/video CD/audio CD. Off: The range of signal levels is reduced to moderate sudden increase in playback volume.	—

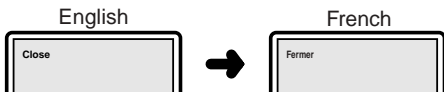
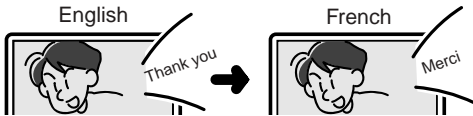
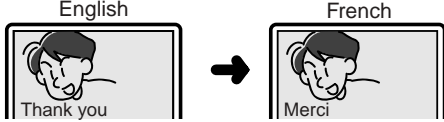
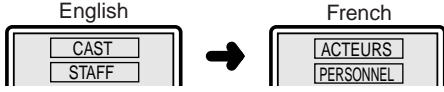
Changing the initial setting of DVD (continued)

Setting	Selectable parameters (* indicates initial settings.)		Description	Reference page
Video Setup 	TV screen	4:3 PS* 4:3 LB 16:9	The screen mode should be set according to the connected TV type.	P. 46
	TV type	NTSC* Auto	<p>Selects the correct color system (TV standard).</p> <p>NTSC: Select this mode for the NTSC TV.</p> <p>Auto: Select this mode for the multi-system TV.</p>	—
	Video output	Interlace* Progressive	<p>The video output mode should be set according to the connected TV type.</p> <p>Interlace: Select this for a non-progressive scan TV (use a video cable, S-video cable, or component video cable).</p> <p>Progressive: Select this for a progressive scan TV (use a component video cable).</p>	P. 17
	Picture mode	Auto Film Video Smart*	<p>For optimize the TV picture when DVD or video CD playback.</p> <p>Auto: Images are automatically optimized according to the video source.</p> <p>Film: Suitable for progressive video output. Select this setting for DVD movies, etc.</p> <p>Video: Suitable for interlaced video output. Select this setting for DVD karaoke, etc.</p> <p>Smart: Optimize special effects for progressive video output.</p>	—


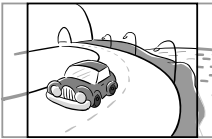

Setting	Selectable parameters (* indicates initial settings.)		Description	Reference page
Display Setup 	Angle mark	On* Off	Select whether to display "■" (On) or not (Off).	P. 29
	Screensaver	On Off*	Select whether to use a screen saver (On) or not (Off). On: Press the ■ button. After 5 minutes or more of inactivity, a screen saver appears. To turn off the screen saver on the screen, press any button on the main unit or remote control. Off: Cancel the screen saver setting.	—
	Closed caption	On Off*	Select whether to display the closed caption (On) or not (Off). On: The closed caption data (subtitles) appear on the TV screen automatically. You can see the closed caption data when playing DVD discs (with "CC" on the jacket) on this unit. Off: Cancel the closed caption setting.	—
System Setup 	Rating Level Please enter a 4-digit password. (Default setting: 6629)	1G 2 3 PG 4 PG 13 5 6 PG-R* 7 NC-17 8 Adult No Limit	Sets a restriction level for DVD viewing.	P. 47
	Password	-----	Password setting.	P. 47
	Restore Info	-----	This resets all settings, except for "Rating Level" and "Password", to the factory defaults.	P. 47

Changing the initial setting of DVD (continued)

■ Language

Indicator	Setting
OSD Language	<p>A language for screen display can be set, such as for initial settings or messages.</p> 
Audio	<p>A language for audio can be set.</p> <p>You can specify a language for conversation and narration.</p> 
Subtitle	<p>A language for subtitle can be set.</p> <p>The subtitles are displayed in a specified language.</p> 
Disc menu	<p>A language for disc menus can be set.</p> <p>Menu screens are displayed in a specified language.</p> 

■ Video format

Indicator	Setting
4:3 LB	<p>When playing a wide image (16:9) disc, black bands are inserted at the top and bottom and you can enjoy full wide images (16:9) on a 4:3 size TV.</p>  <p>A 4:3 disc is played in 4:3.</p>
4:3 PS	<p>When playing a wide image (16:9) disc, the left and right sides of the image are cut (pan scan) to display a natural-looking 4:3 size image.</p>  <p>A wide image disc without pan scan [PS] is played back in 4:3 letterbox.</p> <p>A 4:3 disc is played in 4:3.</p>
16:9	<p>A wide image (16:9) is displayed when playing a wide image (16:9) disc.</p>  <ul style="list-style-type: none"> When playing a 4:3 image disc, the image size depends on the setting of the connected TV. If you play back a wide image (16:9) disc with the unit connected to a 4:3 TV, images appear stretched vertically.

Note:

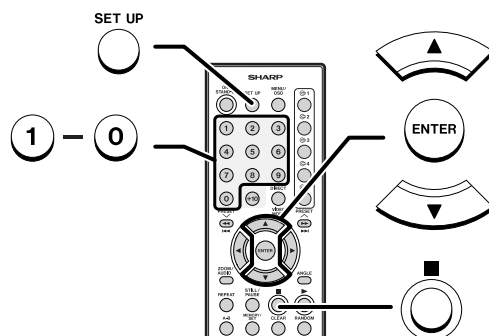
When playing the disc with a fixed video format, it will not change even if the TV screen size is changed.

■ Rating level setting

Indicator	Setting
1 G	Only DVD software intended for children can be played back.
2 3 PG 4 PG 13 5 6 PG-R 7 NC-17	Only DVD software intended for general use and children can be played back.
8 Adult	DVD software of any grade (adult/general/children) can be played back.
No Limit	Rating level control is canceled.

Notes:

- To change the rating level, enter a 4-digit password. It is set to 6629 by default.
- While playing a disc with parental lock, the display may appear requesting a password in order to watch some restricted scenes. In such a case, enter the password to temporarily change the parental level.



■ To change the password

- 1 After pressing the ■ button, press the SET UP button.
- 2 Press the cursor (▲ or ▼) button to select "System Setup" and press the ENTER button.
- 3 Press the cursor (▲ or ▼) button to select "Password" and press the ENTER button.
- 4 Enter a 4-digit old password with the direct number buttons on the remote control.
(Default setting: 6629)
- 5 Enter a 4-digit new password with the direct number buttons on the remote control.
- 6 Enter the new password again for confirmation.
- 7 Press the SET UP button.

When you forget your password

- 1 After pressing the ■ button, press the SET UP button.
- 2 Press the cursor (▲ or ▼) button to select "System Setup" and press the ENTER button.
- 3 Press the cursor (▲ or ▼) button to select "Restore Info" and press the ENTER button.
- 4 Enter 2486 with the direct buttons and then press the ENTER button.
When reset is done according to this method, all settings, including the settings for password and rating level, will be reset to the factory defaults.

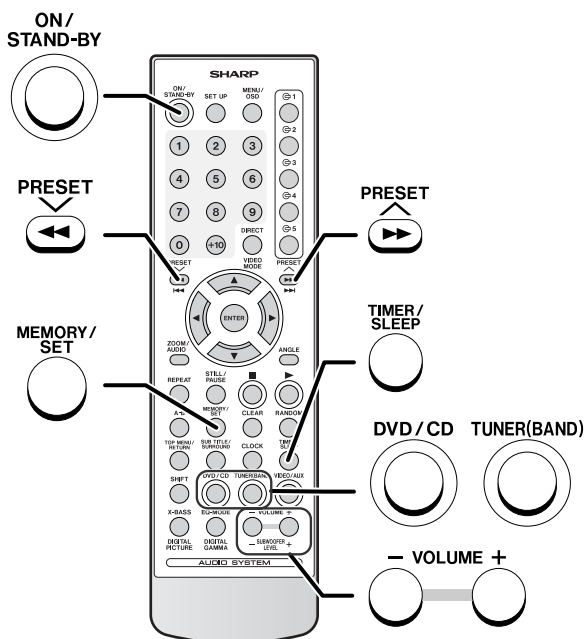
Timer and sleep operation

Timer playback:

The unit turns on and plays the desired source (DVD, video CD, audio CD, MP3 disc, tuner) at the preset time.

Sleep operation:

You can set the system to the power stand-by mode at the specified time.



■ Timer playback

Before setting timer:

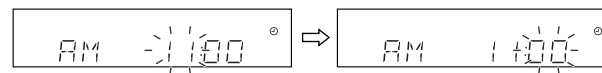
- 1 Press the CLOCK button to check that the clock is set to the correct time. (Refer to page 21.)
- 2 Load the discs to be played.



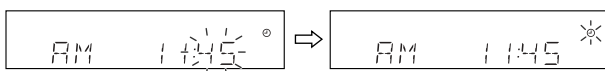
- 1 Press the ON/STAND-BY button to turn the power on.
- 2 Press the DVD/CD or TUNER (BAND) button to select the desired function.
When you select the TUNER (BAND), tune into the desired station.
- 3 Adjust the volume using the VOLUME buttons.
Do not turn the volume up too high.
- 4 Press the TIMER/SLEEP button repeatedly until "⌚" is displayed and then within 8 seconds, press the MEMORY/SET button.



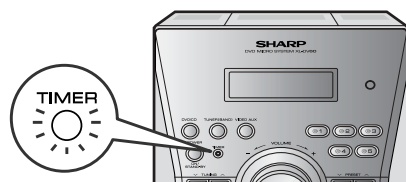
- 5 Within 30 seconds, press the PRESET (∨ or ∧) button to specify the hour to start, then press the MEMORY/SET button.



- 6 Within 30 seconds, press the PRESET (∨ or ∧) button to specify the minute to start, then press the MEMORY/SET button.**



- Settings are displayed in order and the unit will enter the timer stand-by mode.
- Timer set indicator will light up.



To cancel the timer playback:

Press the ON/STAND-BY button to turn the power on.

- 7 When the preset time is reached, playback will start.**

The volume will increase gradually until it reaches the volume you were listening to before your system entered the timer stand-by mode.

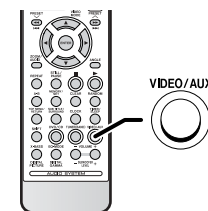
- 8 The unit will enter the power stand-by mode one hour after the timer playback starts.**

To reset or change the timer setting:

Perform "Timer playback" from the beginning.

Note:

When performing timer playback using another unit connected to the VIDEO/AUX jacks, select "VIDEO/AUX" in step 2. At this time, only this unit will be turned on or enter the power stand-by mode automatically. It will enter the power stand-by mode 1 hour after the playback starts. However, the other unit will not be turned on or off.

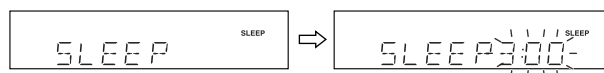


Timer and sleep operation (continued)

■ Sleep operation

1 Play back the desired sound source.

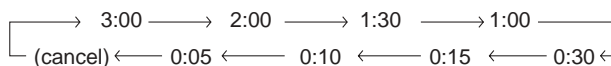
2 Press the **TIMER/SLEEP** button repeatedly until **"SLEEP"** is displayed and then within 8 seconds, press the **MEMORY/SET** button.



To change the sleep time:

While the sleep time is displayed, press the **PRESET** (∨ or ∧) button.

(Maximum: 3 hours - Minimum: 5 minutes)



3 Within 30 seconds, press the **MEMORY/SET** button.

4 The unit will enter the power stand-by mode automatically after the preset time has elapsed.

The volume will be turned down 30 seconds before the sleep operation finishes.

To confirm the remaining sleep time:

Press the **TIMER/SLEEP** button while the sleep timer is set. The remaining sleep time is displayed for about 8 seconds.

To cancel the sleep operation:

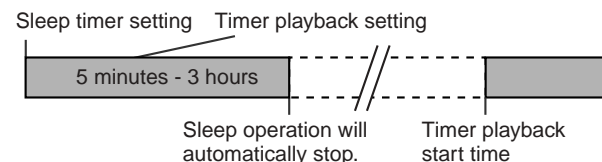
Press the **ON/STAND-BY** button while the sleep timer is set.

■ To use timer and sleep operation together

Example: To fall asleep and wake up to the same radio station
You can play back the same source only (the function cannot be switched).

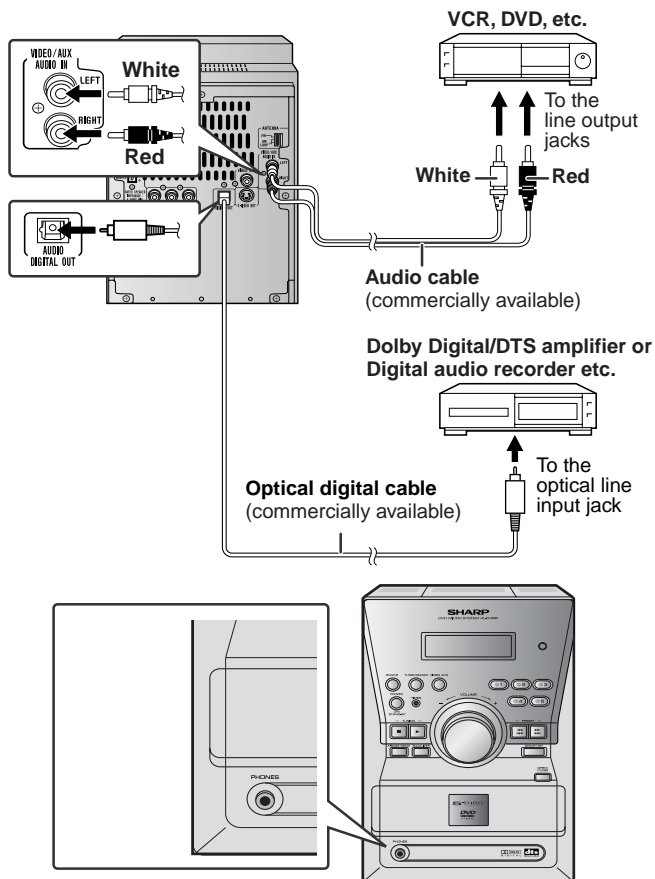
1 Set the sleep time (see left, steps 1 - 3).

2 While the sleep timer is set, set the timer playback (steps 4 - 6, pages 48 - 49).



Enhancing your system

The connection cord is not included. Purchase a commercially available cord as shown below.



■ Listening to the playback sounds from VCR, DVD, etc.

- 1 Use a connection cord to connect the VCR, DVD, etc. to the VIDEO/AUX IN jacks.
When using video equipment, connect the audio output to this unit and the video output to a television.
- 2 Press the ON/STAND-BY button to turn the power on.
- 3 Press the VIDEO/AUX button.
- 4 Play the connected equipment.

Note:

To prevent noise interference, place the unit away from the television.

■ Digital connection to a surround amplifier or a digital audio recorder, etc.

Selecting a sound signal type

When connecting other equipment to the digital audio output, adjust the audio output setting accordingly (see page 43).

BitStream

Choose this when connecting the unit to a Dolby Digital/DTS (5.1ch) surround amplifier. When playing a DVD recorded in Dolby Digital or DTS, bitstream output allows you to enjoy the 5.1ch surround sound.

LPCM

Choose this for PCM output. When playing a DVD recorded in Dolby Digital, the output converts to 2 channel PCM. When a DVD recorded in DTS is played back, signals are sent in bitstream.

■ Headphones

- Before plugging in or unplugging the headphones, reduce the volume.
- Be sure your headphones have a 1/8" (3.5 mm) diameter plug and impedance between 16 and 50 ohms. The recommended impedance is 32 ohms.
- Plugging in the headphones disconnects the speakers automatically. Adjust the volume using the VOLUME control.

XL-DV60

Troubleshooting chart

Many potential problems can be resolved by the owner without calling a service technician.

If something is wrong with this product, check the following before calling your authorized SHARP dealer or service center.

■ General

Symptom	Possible cause
The clock is not set to the correct time.	<ul style="list-style-type: none"> ● Did a power failure occur? Reset the clock. (Refer to page 21.)
When a button is pressed, the unit does not respond.	<ul style="list-style-type: none"> ● Set the unit to the power stand-by mode and then turn it back on. ● If the unit still malfunctions, reset it. (Refer to page 53.)
No sound is heard.	<ul style="list-style-type: none"> ● Is the volume level set to "0"? ● Are the headphones connected? ● Are the speaker wires disconnected? ● Is the TV or amplifier volume level set to "0"?
Noise is heard during playback.	<ul style="list-style-type: none"> ● Move the unit away from any computers or mobile phones.
The power is not turned on.	<ul style="list-style-type: none"> ● Is the unit unplugged?

■ Remote control

Symptom	Possible cause
The remote control does not operate.	<ul style="list-style-type: none"> ● Is the AC power cord of the unit plugged in? ● Is the battery polarity correct? ● Are the batteries dead? ● Is the distance or angle incorrect? ● Does the remote control sensor receive strong light?

■ DVD player

Symptom	Possible cause
No images are displayed.	<ul style="list-style-type: none"> ● Is the TV turned on? ● Is the input of TV switched? ● The video mode may not match the jacks you are using. Change the mode as follows. While in the stop mode, press the SHIFT button and DIRECT/VIDEO MODE button on the remote control a few times (see page 17).
Even though a disc is loaded, "No Disc" is displayed.	<ul style="list-style-type: none"> ● Is the disc loaded upside down? ● Is the disc very dirty? ● Does the disc satisfy the standards? ● Is the unit located near excessive vibrations?
Playback sounds are skipped.	<ul style="list-style-type: none"> ● Is condensation formed inside the unit?
The control buttons do not function. Music or video playback is interrupted.	<ul style="list-style-type: none"> ● Is the disc very dirty? ● Does the disc satisfy the standards? ● Is the unit located near excessive vibrations? ● Is condensation formed inside the unit?
Pictures and sound are skipped.	<ul style="list-style-type: none"> ● Is the disc very dirty? ● Is the unit located near excessive vibrations? ● Is condensation formed inside the unit?
The unit does not operate even if the power is on.	<ul style="list-style-type: none"> ● Is a disc other than a DVD (region number 1 or ALL), video CD, audio CD, CD-R or CD-RW loaded?
Images cannot be played back. (Sound is not heard.)	<ul style="list-style-type: none"> ● Is a disc other than a DVD (region number 1 or ALL), video CD, audio CD, CD-R or CD-RW loaded? ● Is the disc very dirty? ● Is the disc loaded upside down? ● Is the optical pickup dirty? ● Is the TV input set to video (VIDEO1, VIDEO2, etc.)? ● Is the unit turned on?

■ Tuner

Symptom	Possible cause
The radio makes unusual noises continuously.	<ul style="list-style-type: none"> Is the unit placed near the TV or computer? Is the FM antenna or AM loop antenna placed properly? Move the antenna away from the AC power cord if it's located nearby.

■ Condensation

Sudden temperature changes, storage or operation in an extremely humid environment may cause condensation inside the cabinet (laser pickup, etc.) or on the transmitter on the remote control. Condensation may cause the unit to malfunction. If this happens, leave the power on with no disc in the unit until normal playback is possible (about 1 hour). Wipe off any condensation on the transmitter with a soft cloth before operating the unit.

■ If trouble occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.


If such a problem occurs, do the following:

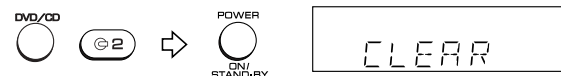
- Set the unit to the stand-by mode and turn the power on again.
- If the unit is not restored in the previous operation, unplug and plug in the unit, and then turn the power on.

Note:

If neither operation above restores the unit, clear all the memory by resetting it.

■ Clearing all the memory (reset)

- Press the ON/STAND-BY button to enter the power stand-by mode.
- While pressing down the DVD/CD button and the  button, press the ON/STAND-BY button until "CLEAR" appears.



Caution:

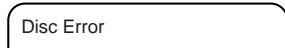
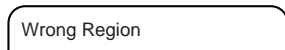
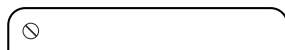
When you reset, all data is deleted and the settings return to the default. (DVD initial settings are retained.)

■ Before transporting the unit

Remove all discs from the unit. Make sure there is no disc in the disc tray. Then, set the unit to the power stand-by mode. Carrying the unit with discs left inside can damage the unit.

Error indicators and warnings

When you load an unplayable disc or fail to perform operations properly, the following messages are displayed on the TV screen.

TV screen	Meaning
	The disc cannot be played with this system or it is loaded in an incorrect way.
	The region number of the DVD is not "1" or "ALL".
	The disc does not support the operation described in this operation manual.

Maintenance

■ Cleaning the laser pickup lens

In order to ensure proper operation of the DVD player, preventative maintenance (cleaning of the laser pickup lens) should be performed periodically. Lens cleaners are commercially available. Contact your local DVD software dealer for options.

■ Cleaning the cabinet

Periodically wipe the cabinet with a soft cloth and a diluted soap solution, then with a dry cloth.

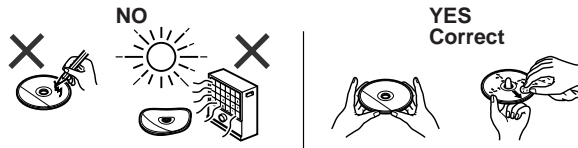
Caution:

- Do not use chemicals for cleaning (gasoline, paint thinner, etc.). It may damage the cabinet finish.
- Do not apply oil to the inside of unit as this may cause malfunctions.

■ Care of discs

Discs are fairly resistant to damage, however mistracking can occur due to an accumulation of dirt on the disc surface. Follow the guidelines below for maximum enjoyment from your disc collection and player.

- Do not write on either side of the disc, particularly the non-label side from which signals are read. Do not mark this surface.
- Keep your discs away from direct sunlight, heat, and excessive moisture.
- Always hold the discs by the edges. Fingerprints, dirt, or water on the discs can cause noise or mistracking. If a disc is dirty or does not play properly, clean it with a soft, dry cloth, wiping straight out from the center, along the radius.



Specifications

As part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

■ General

Power source	AC 120 V, 60 Hz
Power consumption	116 W
Dimensions	Width: 6-5/16" (160 mm) Height: 9-7/16" (240 mm) Depth: 12-9/16" (319 mm)
Weight	12.3 lbs. (5.6 kg)

■ Amplifier

Output power	Front speakers: 37.5 watts minimum RMS per channel into 6 ohms from 100 Hz to 20 kHz, 10% total harmonic distortion Subwoofer: 45 watts minimum RMS into 6 ohms from 70 Hz to 130 Hz, 10% total harmonic distortion
Audio output terminals	Front speakers and subwoofer: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms) Optical digital output: Square type × 1
Audio input terminals	Video/Auxiliary (audio signal): 500 mV/47 k ohms
Video output terminals	Video output: RCA type × 1 S-video output: S-terminal × 1 Component video output: RCA type × 3 (Pr/Cr, Pb/Cb, Y)

■ DVD player

Type	5-disc multi-play compact disc player	
Signal readout	NTSC color	
Supported disc types	DVD (region number 1, ALL), video CD, audio CD, CD-R, CD-RW	
Video signal	Horizontal resolution: 500 lines S/N ratio: 75 dB	
Audio signal	Frequency characteristics	Linear PCM DVD: 30 Hz to 20 kHz (sampling rate: 48 kHz) 30 Hz to 20 kHz (sampling rate: 96 kHz) CD: 30 Hz to 20 kHz
	S/N ratio	CD: 95 dB (1 kHz)
	Dynamic range	Linear PCM DVD: 92 dB CD: 92 dB
	Total harmonic distortion ratio	0.14 %

■ Tuner

Frequency range	FM: 87.5 - 108 MHz AM: 530 - 1,720 kHz
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■ Front speaker

Type	2-way type speaker system (magnetic shield) 1-9/16" (4 cm) semi dome tweeter 4" (10 cm) woofer
Maximum input power	75 W
Rated input power	37.5 W
Impedance	6 ohms
Dimensions	Width: 6-1/2" (165 mm) Height: 9-7/16" (240 mm) Depth: 9-3/8" (238 mm)
Weight	5.1 lbs. (2.3 kg)/each

■ Subwoofer

Type	Subwoofer system (magnetic shield) 5-1/8" (13 cm) woofer
Maximum input power	90 W
Rated input power	45 W
Impedance	6 ohms
Dimensions	Width: 6-5/16" (160 mm) Height: 9-7/16" (240 mm) Depth: 11-1/4" (285 mm)
Weight	7.3 lbs. (3.3 kg)

CONSUMER LIMITED WARRANTY

SHARP ELECTRONICS CORPORATION warrants to the first consumer purchaser that this Sharp brand product (the "Product"), when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period(s) set forth below.

This warranty does not apply to any appearance items of the Product nor to the additional excluded item(s) set forth below nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth below and provide proof of purchase to the servicer.

The limited warranty described herein is in addition to whatever implied warranties may be granted to purchasers by law. ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE PERIOD(S) FROM THE DATE OF PURCHASE SET FORTH BELOW. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time period described herein on behalf of Sharp.

The warranties described herein shall be the sole and exclusive warranties granted by Sharp and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Sharp to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall Sharp be liable, or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than an authorized servicer. Nor shall Sharp be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Model Specific Section

Your Product Model Number & Description:

XL-DV60 DVD Micro System

(Be sure to have this information available when you need service for your Product.)

Warranty Period for this Product:

One (1) year parts and labor from the date of purchase.

Additional Item(s) Excluded from Warranty Coverage (if any):

Non-functional accessories, supplies, and consumable items.

Where to Obtain Service:

At a Sharp Authorized Servicer located in the United States.

To find a location of the nearest Sharp Authorized Servicer, call Sharp toll free at 1-800-BE-SHARP.

What to do to Obtain Service:

Ship prepaid or carry in your Product to a Sharp Authorized Servicer.

Be sure to have **Proof of Purchase** available. If you ship the Product, be sure it is insured and packaged securely.

TO OBTAIN SUPPLY, ACCESSORY OR PRODUCT INFORMATION, CALL **1-800-BE-SHARP**.

SHARP

SHARP ELECTRONICS CORPORATION

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