RadioShack®

www.radioshack.com℠

Complete 7-Piece 600-Watt Home Theater Audio System

with 3-DVD Changer

Owner's Manual

Please read before using this equipment.

❒ Read this First

This audio system is made and tested to meet exacting safety standards. It meets both UL and FCC requirements.

WARNING: To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture.

	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 PERSONNEL.

This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.

This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

Warnings:

- This system employs a laser light beam. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.
- The use of controls, adjustments, or procedures other than those specified herein might result in hazardous radiation exposure.

THE FCC WANTS YOU TO KNOW

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 your local RadioShack store or an experienced radio/TV technician for help.
- If you cannot eliminate the interference, the FCC requires that you stop using your system.

Changes or modifications not expressly approved by RadioShack may cause interference and void the user's authority to operate the equipment.

REGION MANAGEMENT INFORMATION

Region Management Information: This DVD Player is designed and manufactured to respond to the Region Management Information that is recorded on a DVD disc. If the Region number described on the DVD disc does not correspond to the Region number of this DVD player, this DVD player cannot play that disc.

The Region number of this DVD player is 1 (USA/CANADA).

Notes on Unauthorized Discs

You may not be able to play back some DVD video discs on this player if they were purchased from outside your geographic area or made for business purposes. When you try to play back an unauthorized disc, "Check Regional Code" appears on the TV screen.

NOTES ON COPYRIGHT

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

DVD video discs are copy protected, and any recordings made from these discs will be distorted.

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.

PLACING THE RECEIVER

Do not place objects directly on top of the receiver as it could prevent proper heat dispersal.

When installing in a rack or shelf, be sure to leave more than 8 inches of space above and behind the receiver.

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Spatializer(R) 3-D Stereo, Spatializer N-2-2 (TM) and the circle-in-square device are trademarks owned by Desper Products, Inc,.
All Rights Reserved.

MAKING CABLE CONNECTIONS

Be careful not to bend cables over the top of the receiver.

If cables are placed on top of the receiver, the magnetic field prodcued by the receiver's transformers can cause the speakers to produce a humming noise.

USING DISCS

When using discs, you must always take the following precautions:

- Do not touch the playback side of the disc.
- Do not attach paper or tape to discs.
- Do not store discs in a place subject to direct sunlight or near heat sources.
- Do not store discs in places subject to moisture and dust such as a bathroom or near a humidifier.
- Store discs vertically in a case. Stacking or placing objects on discs outside of their case may cause warping.

Cleaning Discs

Fingerprints and dust on the disc cause picture and sound deterioration. Wipe the disc from the center outward with a soft cloth. Always keep the disc clean.

If you cannot wipe off the dust with a soft cloth, wipe the disc lightly with a slightly moistened soft cloth and finish with a dry cloth.

Do not use any type of solvents such as thinner, benzene, commercially available cleaners or anti-static spray for vinyl LPs. They might damage the disc.

IMPORTANT SAFETY INSTRUCTIONS

Careful attention is devoted to quality standards in the manufacture of your system, and safety is a major factor in its design. However, safety is also your responsibility.

This section lists important information that will help you properly use and enjoy your system. Read all the included safety and operating instructions before using your system. Follow them closely, and retain them for future reference.

1. Heed Warnings — Follow all warnings on the product and in the operating instructions.
2. Cleaning — Unplug this product from the wall outlet before cleaning. Use only a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
3. Attachments — Do not use attachments/accessories not recommended by the product manufacturer, as they might create a hazard.
4. Water and Moisture — Do not use this product near water (for example, near a bathtub, washbowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool).
5. 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. Follow the manufacturer's instructions for mounting, and use a recommended mounting accessory.
   - Carts — Move the product on a cart carefully. Quick stops, excessive force, and uneven surfaces may cause the product/cart to overturn.
6. Disc Tray — Keep your fingers well clear of the disc tray as it is closing. It may cause serious personal injury.
7. Burden — Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.
8. Connecting — When you connect the product to other equipment, turn off the power and unplug all the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.
9. Sound Volume — Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.
10. Sound Distortion — Do not allow the product to output distorted sound for a longtime. It may cause speaker overheating and fire.
11. Headphones — When you use the headphones, keep the volume at a moderate level. If you use the headphones continuously with high volume sound, it may cause hearing damage.
12. Laser Beam — Do not look into the opening of the disc tray or ventilation opening of the product to see the source of the laser beam. It may cause sight damage.
13. Disc — Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.
14. Ventilation — Slots and openings in the cabinet provide ventilation, ensure reliable operation, and protect from overheating. Do not block or cover these openings, and do not place the product on a bed, sofa, rug, or other similar surface. Do not place the product in a built-in installation such as a bookcase or rack unless it provides proper ventilation as specified by the manufacturer.
15. Power Sources — Operate this product using only the power source indicated on its marking label. If you are not sure of your home's power type, consult your product dealer or local power company.
16. Polarization — This product is equipped with a polarized AC line plug (a plug having one blade wider than the other). This plug will fit in the power outlet only one way. This is a safety feature. If you cannot insert the plug fully into the outlet, try reversing the plug. If the plug still doesn't fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug. If you need an extension, use a polarized cord.
17. Power-Cord Protection — Route power-supply cords so they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

18. 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.

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

20. Objects and Liquids — 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.

21. 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.

22. Damage Requiring Service — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

    - When the power-supply cord or plug is damaged.
    - If liquid has been spilled or objects have fallen into the product.
    - If the product has been exposed to rain or water.
    - 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 normal operation.

- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance.

23. Replacement Parts — When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or having the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

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

25. Wall or Ceiling Mount — The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

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

27. Non-use Periods — Unplug the system's power cord when you will not use it for extended periods.

28. 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.

Note to CATV System Installer

This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which 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.

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.

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❒ Features

Your Complete 7-Piece 600-Watt Home Theater Audio System is a great system that incorporates some of the best features in home theater technology. The Home Theater Audio System comes complete with a shielded center-channel speaker, a band pass-type subwoofer, two shielded front-channel speakers, two rear surround speakers, a remote control, and a receiver equipped with a tuner and a 3-disc DVD player.

Its other features include:

Dolby Digital, Dolby ProLogic, and DTS Sound Settings — let you use the Home Theater Audio System for a movie-theater surround sound experience

Adjustable Speaker Size, Channel Level, and Distance — lets you customize your setup for a true surround sound experience

Additional Component Connections — let you connect other audio and audio/visual components to the receiver so that you can use the system's surround sound speakers

Night Mode — lets you compress the dynamic range, reducing the difference in loudness between different sounds

Parental Lock (Rating Level) — lets you set a ratings level so that your children cannot watch a DVD that has a rating higher than you set

Sleep Timer — lets you program the receiver to turn off after a set time period

CONNECTING COMPONENTS

You must connect a TV to the receiver in order to use the receiver's DVD player. You can connect other audio and audio/visual components to the receiver in order to use the Home Theater Audio System's surround sound capabilities.

Connecting a TV

Use audio/video cords (not supplied) to connect a TV to the receiver. Connect red plugs to the red **AUDIO** jacks and white plugs to the white **AUDIO** jacks.

If your TV has an S-Video jack, use an S-Video cable to connect your TV to the receiver's **S-VIDEO OUT**. If your TV does not have an S-Video jack, use audio/video cord to connect your TV to the receiver's **MONITOR OUT**.

Connecting a Cassette Deck

Use audio/video cords (not supplied) to connect a cassette deck to the receiver. Connect red plugs to the red **AUDIO** jacks and white plugs to the white **AUDIO** jacks. Make sure you connect the VCR to both the **TAPE IN** and **TAPE OUT** sets of jacks.

Note: If the cassette deck is placed too close to the receiver, noise might occur during cassette playback. If this happens, move the cassette deck farther away from the receiver.

Connecting a VCR

Use audio/video cords (not supplied) to connect a VCR to the receiver. Connect red plugs to the red **AUDIO** jacks and white plugs to the white **AUDIO** jacks.

Connect yellow plugs to the yellow **VIDEO** jacks.

Note: Make sure you connect the VCR to both the **IN** and **OUT** sets of jacks.

Connecting a Satellite Receiver or Cable Box

Use audio/video cords (not supplied) to connect a satellite receiver or cable box to the receiver. Connect red plugs to the red **AUDIO** jacks and white plugs to the white **AUDIO** jacks.

Note: Your cable box or satellite receiver must use audio/video cords or Toslink optical cable to connect to the receiver. If your equipment only uses coaxial cable, you cannot connect it to the receiver.

If your satellite receiver or cable box has digital output, use an optical cable to connect the satellite receiver to the home theater receiver's **SAT IN** optical jack. If your satellite receiver or cable box does not have digital output, use analog cable to connect it to the home theater receiver's **SAT IN** video jack.

Connecting a Digital Optical Audio Devices

You can connect a digital audio device such as an DAT (Digital AudioTape) or MD (Mini Disc) recorder to the receiver's **DIGITAL OUT** to record audio from the receiver. Use Toslink optical cable to connect the DAT or MD recorder to the receiver's **DIGITAL OUT** optical jack.

You can also connect a satellite receiver, MD or DAT recorder, CD player, or anything else with digital output to the receiver's **SAT IN** optical jack. Use Toslink optical cable to connect the desired device to the receiver.

Connecting an Auxiliary Audio Device

You can also connect an audio device that does not require Toslink (such as an MP3 player, playback cassette deck, or portable CD player) to the Home Theater Audio System. Use audio cords to connect the desired device to the receiver's **AUX** jacks. Connect red plugs to the red **AUDIO** jacks and white plugs to the white **AUDIO** jacks.

Connecting a Second Sub Woofer

You can connect a second or larger powered subwoofer to the system. Connect the sub woofer to the receiver's **SUB WOOFER PRE-OUT** jack using shielded audio cable (not supplied).

CONNECTING ANTENNAS

When connecting equipment, always make sure the power is switched off and the power cord is disconnected from the wall outlet.

FM Indoor Antenna

In an area with strong FM signals, the T-type FM antenna (supplied) is sufficient.

1. Use a flat or Phillips screwdriver to loosen the screws on the supplied transformer.
2. Place the metal connectors on the end of theT-type antenna's base on the transformer's metal contacts (underneath the screw heads) then tighten the screws.
3. Plug the transformer into **ANTENNA FM 75 Ω**.
4. Extend the T-antenna's other two wires and attach them to a wall or window frame for the best possible reception.

If you have a cable FM antenna, use a coaxial cable to connect it to **ANTENNA FM 75 Ω**.

FM Outdoor Antenna

In an area where FM signals are weak, you must use a 75-ohm unbalanced-type outdoor FM antenna (not supplied). Generally, a 3-element antenna will be sufficient. If you live in an area where the FM signals are particularly weak, it may be necessary to use one with 5 or more elements.

Connect the antenna's coaxial cable to the supplied transformer. Plug the transformer into **ANTENNA FM 75 Ω**.

AM Indoor Loop Antenna

The supplied high-performance AM loop antenna is sufficient for good reception in most areas.

Connect the loop antenna's wires to **AM** and **GND**. Place the antenna in a location (for example, on a shelf or window frame) that gives the best reception.

Keep the antenna as far away as possible from the entire system, speaker cords and the power cord to prevent unwanted noise.

AM Outdoor Antenna

If the supplied AM loop antenna does not deliver sufficient reception, use an outdoor AM antenna (not supplied).

Note: Even when using an outdoor AM antenna, do not disconnect the AM indoor loop antenna.

Use an insulated wire more than 15 ft (5 m) long. Strip one end, and connect that end to **AM**.

The antenna wire should be strung outdoors or indoors near a window. For better reception, connect the **GND** terminal to a reliable ground.

CONNECTING THE SPEAKERS

When connecting equipment, always make sure the power is switched off and the power cord is disconnected from the wall outlet.

Note: Use speakers with a normal impedance of 6 Ohms.

Follow these steps to connect the speakers.

1. Remove the plastic end pieces from the wires.
2. Twist the exposed ends of the bare wire strands.
3. Press up (or down) the speaker's terminal and insert the appropriate wire ends. The color of the speaker wire's plastic coating is the same as the color of the matching terminal.

   Note: Be sure to connect each speaker to the appropriate speaker terminal, connecting positive to positive (+ to +) and negative to negative (– to –).
4. Connect the front speaker's wire to the receiver's **SPEAKERS FRONT L** and **R** terminals (Red/Black).

   Connect the rear speaker's wire to the receiver's **SPEAKERS REAR L** and **R** terminals (Gray/Black).

   Connect the center speaker's wire to the receiver's **SPEAKERS CENTER** terminal (Blue/Black).

   Connect the subwoofer's wire to the receiver's **SPEAKERS WOOFER** terminal (Brown/Black).
5. Release the speaker terminal.
6. Plug the AC power cord into an AC wall socket.

PLACING THE SPEAKERS

1. Place the front left and right speakers at equal distances from the TV.
2. Install the center speaker above or below the TV so that the sound of the center channel is localized at the TV screen.

   Caution: If you choose to install the center speaker on top of the TV, be sure to secure it, to reduce the risk of damage or injury resulting from the speaker falling from the TV in the event of external shocks (for example, earthquakes).
3. If possible, install the surround speakers slightly above ear level.

   Note: Try not to install the surround speakers farther away from the listening position than the front and center speakers. Doing so can weaken the surround effect.

To achieve the best possible surround sound, install your speakers as shown below. Be sure all speakers are installed securely to prevent accidents and improve sound quality.

Overhead view of speaker set up

(Illus of speaker set up, please use the illus of 31-5011 if necessary)

INSTALLING BATTERIES IN THE REMOTE CONTROL

Your remote control requires two AAA batteries (not supplied) for power. For the best performance and longest life, we recommend RadioShack alkaline batteries.

Cautions:

- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries or different types of batteries.

Follow these steps to install batteries.

1. Slide the battery compartment cover in the direction of the arrow to remove it.
2. Place the batteries in the compartment as indicated by the polarity symbols (+ and –) marked inside.
3. Replace the cover.

When the remote control stops operating properly, replace the batteries.

Warning: Dispose of old batteries promptly and properly. Do not burn or bury them.

Caution: If you do not plan to use the remote control for a month or longer, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.

❒ Receiver Operation

A QUICK LOOK AT THE RECEIVER'S CONTROLS

DISC SKIP/TUNING MODE – Press to skip discs in DVD/CD mode.
In tuner mode, press to switch between presets and manual tuning (see "Switching Between Preset Stations and Manual Tuning" on Page 10).

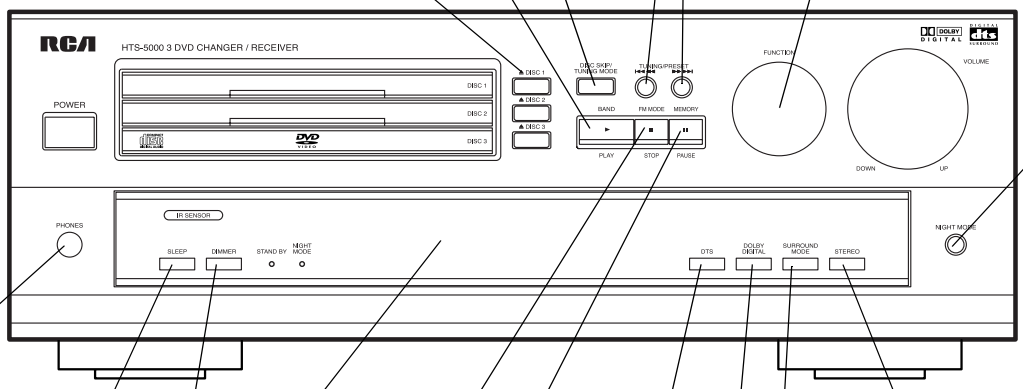
FUNCTION – Rotate to select the desired audio or audio/video source. The selected source name appears on the display panel.

TUNING/PRESET – Repeatedly press to tune to AM or FM stations and select preset stations in tuner mode.

BAND/PLAY – Press to select AM or FM band in tuner mode.
Press to plays back the disc in DVD/CD mode.

DISC 1, 2, 3 – Press to open or close the disc trays.
Note: You cannot use these buttons in tuner mode.

NIGHT MODE – When the sound source is Dolby Digital or stereo mode, press to compress large dynamic range (see XXXX on page XX)..



Display Panel

PHONES – This jack is compatible with wide range of conventional dynamic headphone types.
When you connect headphones, the unit automatically selects stereo mode.

MEMORY/ PAUSE – stores a station in memory in tuner mode; pauses the disc in DVD/CD mode.

FM MODE/STOP – In tuner mode, press to select stereo or monaural mode for FM in tuner mode.
In DVD/CD mode, press to stop the disc.

SURROUND MODE – Press to switch surround modes between PRO LOGIC, THEATER, HALL, and STADIUM for analog equipment (not for SAT-OPT function).

SLEEP – Repeatedly press to set the sleep timer.

DIMMER – Press once to dim the display panel.
Press one more to return to normal status.

DTS – Press to switch to 5.1 Channel DTS from stereo mode.

DOLBY DIGITAL – Press to switch to 5.1 Channel Dolby Digital from stereo mode.

STEREO – Press to switch from surround mode to stereo mode.
In Dolby Digital mode, press to change the mode to stereo. ST appears.

USING THE TUNER

1. Press **POWER**. The receiver defaults to the last selected function.
2. Rotate **FUNCTION** to the tuner function.
3. Press **BAND** to select the desired band.
4. Repeatedly press **TUNING/PRESET** ⏮ ◀◀ or ▶▶ ⏭ to tune in the desired station. When you reach a station, **Tuned** appears above the station number.

   To change the frequency by one step, press **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭ quickly (less than half a second).

   To tune to the next clear frequency, hold down **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭, then release the button. The system automatically tunes to the next strong station.

Listening To FM Stereo Broadcasts

In FM mode, press **FM MODE** to select stereo or mono. When you select the stereo mode, **ST** appears to the right of **Tuned**. It goes off when you select mono.

When you listen to very weak FM stereo stations, you might hear higher-than-normal background hiss. Switch to mono to eliminate the hiss.

Presetting Radio Stations

You can preset 30 AM and 30 FM stations regardless of the reception. Tune in the desired stations using auto or manual tuning.

Manual Preset

1. Press **BAND** to select the desired band.
2. Repeatedly press **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭ to tune in the desired station.

   To change the frequency by one step, press **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭ quickly (less than half a second).

   To tune to the next clear frequency, hold down **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭, then release the button. The system automatically tunes to the next strong station.
3. Press **MEMORY**. **MEMO** flashes for 5 seconds. When **MEMO** goes off, press the button again (**MEMO** flashes again).
4. Select the preset number with **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭.
5. Press **MEMORY** again.
6. Repeat Steps 1–5 to memorize other stations (up to 30 stations for each band). If you store a new station on a memory number in which a station is stored, the old station is cleared.

To store stations on the other band, repeat Steps 1–6, substituting the other band in Step 1.

Note: If you want to store more stations later, you might find that pressing **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭ only moves the tuner to the next preset station (instead of moving the frequency one step). If this happens, press **TUNING MODE** to return to manual tuning (see "Switching Between Preset Stations and Manual Tuning").

Auto Preset

1. Press **BAND** to select the desired band.
2. Hold down **MEMORY** for about 3 seconds.
3. The tuner automatically begins scanning, and stores the first 30 strong signals it receives.
4. Scanning stops automatically after radio stations have been stored in the auto preset memory.

   Note: Press **MEMO** again to stop auto scanning earlier.

To store stations on the other band, repeat Steps 1–4, substituting the other band in Step 1.

Listening to Preset Stations

To listen to a radio station stored in the station memory, press **TUNING MODE** then **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭.

Switching Between Preset Stations and Manual Tuning

If you store preset stations, pressing **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭ scrolls through the preset stations, rather than changing the frequency station by station.

To switch to scrolling by individual stations, press **TUNING MODE**, then repeatedly press **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭ quickly to change the frequency by one step. Or hold down **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭ to tune to the next clear station.

To switch back to scrolling through the preset stations, press **TUNING MODE**, then repeatedly press **TUNING/PRESET** ⏮ ◀◀ or ▶▶⏭ until you reach the desired station.

USING THE CD PLAYER

You can use the receiver's 3-DVD changer to listen to audio CDs.

Important: You can only use audio CDs and some CD-Rs with the reciever. CD-ROM, CD-G, photo CD, and CD-i discs can not be played on this player.

1. Press **POWER**.
2. Rotate **FUNCTION** until **DVD/CD** appears.
3. Press **DISC 1**, **DISC 2**, or **DISC 3** to open the desired drawer.
4. Place the desired CDs in the tray, then press the appropriate DISC button again to close the drawer.

   Note: If you want to load more than one CD, you can press another DISC button. The receiver closes the open drawer and opens the drawer of the DISC button you pressed.
5. To select a CD, repeatedly press **DISC SKIP** until the desired CD's number blinks.
6. Press **PLAY**. The disc icon (at the far left) begins to rotate.

   To pause playback, press **PAUSE**. The disc icon flashes rapidly. To resume playback, press **PAUSE** again or press **PLAY**.

To move forward through a track, hold down **TUNING/PRESET** ▶▶▶▶▌ for about 2 seconds. Repeat up to two times to increase the fast-forward speed. To resume playback, press **PLAY**.

Note: At the beginning or end of a track on an audio CD, the scan speed returns to normal.

To move backward through a track, hold down **TUNING/PRESET** ▌◀◀◀ for about 2 seconds. Repeat up to two times to increase the rewind speed. To resume playback, press **PLAY**.

To skip to the next track on the CD, press **TUNING/PRESET** ▶▶▶▶▌ once.

To return to the beginning of the current track, press **TUNING/PRESET** ▌◀◀◀.

To return to the previous track, press **TUNING/PRESET** ▌◀◀◀ twice.

To stop playback, press **STOP**. The disc icon stops rotating, and **RESUME** appears. To resume playback, press **PLAY**. To stop playback completely, press **STOP** again.

Continuous Play

When the receiver finishes playing an audio CD, it automatically plays the disc on the next tray.

Changing the Sound Mode

You can listen to your CDs using Stereo or Surround modes.

For stereo only, press **STEREO** once.

For a surround mode, repeatedly press **SURROUND MODE** until the desired mode (**THEATER**, **HALL**, **STADIUM**, or **PRO LOGIC**) appears.

Note: Dolby Digital and DTS modes do not work with CDs.

USING NIGHT MODE

You can use Night Mode to compress large dynamic ranges, resulting in “quieter” explosions and other loud sounds in movies. The Night Mode feature adjusts the dynamic range so that there is less disparity in the noise level of all sounds in a movie (explosions, music, dialogue, and so on).

While in Dolby Digital or Stereo mode, press **NIGHT MODE** to turn Night Mode on. Press **NIGHT MODE** again to turn it off.

Note: Night Mode is not available for movies using DTS mode.

USING THE SLEEP TIMER

You can set the sleep timer to turn off the receiver after a set period of time.

Repeatedly press **SLEEP** to set the sleep timer to the desired time (**10**, **20**, **30**, **40**, **50**, **60**, **70**, **80**, or **90** minutes). The receiver turns off when the selected time has expired.

USING THE DIMMER

Press **DIMMER** to make the display dimmer. Press again to return the display to its original brightness.

❒ *Remote Control Operation*

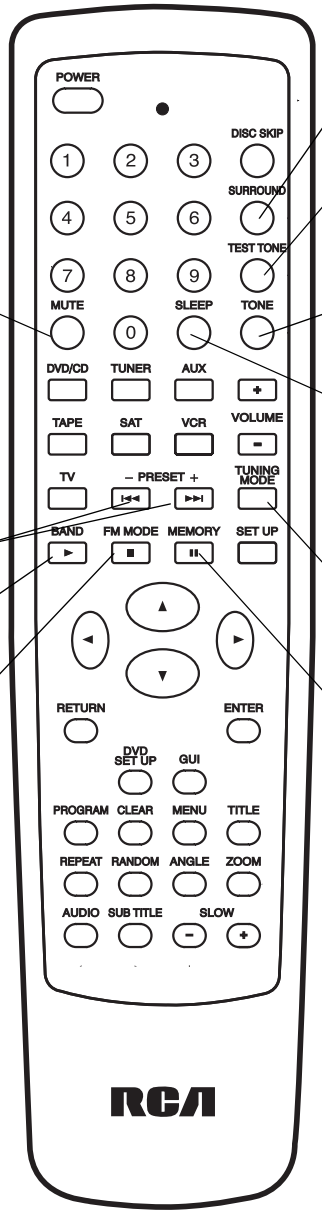
A QUICK LOOK AT THE REMOTE CONTROL

SURROUND – When you select an analog source (TUNER, AUX, TAPE, TV, VCR, or SAT), as you press SURROUND, the surround mode changes.

TEST TONE – Turns on or off the test tone function in DTS, DOLBY DIGITAL, or PRO LOGIC mode. The test tone is output from Front L speaker, Center speaker, Front R speaker, Surround R speaker, Surround L speaker, (Subwoofer speaker: when Subwoofer on).

MUTE – Press to immediately decrease the sound level. MUTE appears on the display panel. To restore the sound, press again.

TONE – Lets you adjust the low frequency level (BASS) with (left arrow icon) or (right arrow icon) and also you can adjust high frequency level (TREBLE) with (left arrow icon) or (right arrow icon) according to your taste and room acoustics.



SLEEP – Press to set the sleep time. The sleep time changes to 10, 20, 30, ... 90 (minutes), and OFF (former display).

PRESET – / + –- During AM or FM reception, you can scan through other frequencies or select the preset numbers.

BAND – selects AM or FM band while listening to the tuner function.

FM MODE (FM MONO/STEREO) – selects FM mono or stereo mode.

TUNING MODE – selects and deselects preset mode.

MEMORY – Press to memorize the desired station frequency.

OPERATING RANGE OF THE REMOTE CONTROL

The remote control may not work properly if:

- There are obstacles between the remote control and the receiver's remote sensor.
- Direct sunlight or fluorescent light is shining onto the remote sensor.
- The receiver is located near a device that is emitting infrared rays.
- The receiver is operated simultaneously with another infrared remote control.

SETTING UP THE SURROUND SOUND SYSTEM

You can use your Home Theater Audio System as soon as you take it out of the packaging. If you wish to fine-tune the system (for example, substitute different speakers or alter the sound distribution), follow the directions below.

Changing the Speaker Size

Note: If you are using the speakers provided in your Home Theater Audio System, the speaker size defaults are correct. If you are using other speakers, follow these steps.

1. Press **POWER**.
2. Press **SETUP**. **SP SIZE** appears.
3. Press ▶. **FRONT** appears.
4. Press ▶ again. **F-SMALL** appears. To change to **F-LARGE**, press ▲ or ▼.

   Note: If the cone size (diameter) of the speaker is larger than 5 inches, change to **F-LARGE**.
5. Press **ENTER**. **CENTER** appears.
6. Press ▶. **C-SMALL** appears. To change to **C-LARGE**, press ▲ or ▼. To change to **C-NONE**, press ▲ or ▼ again.

   Note: If the cone size (diameter) of the speaker is larger than 5 inches, set the item to **C-LARGE**.
7. Press **ENTER**. **SURR** appears.
8. Press ▶. **S-SMALL** appears. To change to **S- LARGE**, press ▲ or ▼. To change to **S-NONE**, press ▲ or ▼ again.

   Note: If the cone size (diameter) of the speaker is larger than 5 inches, set the item to **S-LARGE**.
9. Press **ENTER**. **SUB-WF** appears.
10. Press ▶. **SW-YES** appears. If you aren't using a subwoofer, change to **SW-NO** by pressing ▲ or ▼.
11. Press **ENTER**. **FRONT** appears. Press **SETUP** again to exit.

Changing the Channel Level

The default channel level settings are 0 dB for each speaker. You can change the speakers' sound distribution to suit your surround sound needs. For example, if you are closer to the left front speaker than the right front speaker, the left front speaker might seem "louder" than the right one. To adjust it, you must change the channel level for one or both speakers until the sound evens out.

Follow these steps to change the channel level.

1. Press **SETUP**, then ▲. **CH LEVEL** appears.
2. Press ▶. **FL LEVEL** appears.
3. Press ▶ again. **F 0dB** appears. To change the front left speaker's level, repeatedly press ▲ or ▼ until you reach the desired level (**-10** to **+10 dB**).
4. Press **ENTER**. **C LEVEL** appears.
5. Press ▶. **C 0dB** appears. To change the center speaker's level, repeatedly press ▲ or ▼ until you reach the desired level (**-10** to **+10 dB**).
6. Press **ENTER**. **FR LEVEL** appears.
7. Press ▶. **FR 0dB** appears. To change the front right speaker's level, repeatedly press ▲ or ▼ until you reach the desired level (**-10** to **+10 dB**).
8. Press **ENTER**. **SR LEVEL** appears.
9. Press ▶. **SR 0dB** appears. To change the rear right speaker's level, repeatedly press ▲ or ▼ until you reach the desired level (**-10** to **+10 dB**).
10. Press **ENTER**. **SL LEVEL** appears.
11. Press ▶. **SL 0dB** appears. To change the rear left speaker's level, repeatedly press ▲ or ▼ until you reach the desired level (**-10** to **+10 dB**).
12. Press **ENTER**. **SW LEVEL** appears.
13. Press ▶. **SW 0dB** appears. To change the sub woofer's level, repeatedly press ▲ or ▼ until you reach the desired level (**-10** to **+10 dB**).
14. Press **ENTER**. **FL LEVEL** appears.
15. Press **SETUP** to exit.

Changing the Speaker Distance

When you have your home theater arrangement the way you want it (speakers, receiver, and any components), you can change the speaker distance entered in the receiver's memory. The default settings are 10 ft.

1. Imagine there is a straight line running from the front left speaker to the front right speaker.
2. Measure the distance in a perpendicular line from your listening position (for example, your couch) to the imaginary line.

   Note: Do not meaure the distance to the speakers, just the line.
3. Repeat Steps 1–2 for the rear (surround) speakers.
4. Measure the distance in a perpendicular line from your listening position (for example, your couch) to the center speaker.
5. Press **SETUP**, then press ▲ twice. **SP DIST** appears.
6. Press ▶. **FRONT** appears.
7. Press ▶ again. **F 10FT** appears. To change the distance between the listening position and the front speakers, repeatedly press ▲ or ▼ until you reach the desired level (**0** to **30 FT**).
8. Press **ENTER**. **CENTER** appears.
9. Press ▶. **C 10FT** appears. To change the distance between the listening position and the center speaker, repeatedly press ▲ or ▼ until you reach the desired level (**0** to **30 FT**).
10. Press **ENTER**. **SURR.** appears.

11. Press ▶. S 10FT appears. To change the distance between the listening position and the rear (surround) speakers, repeatedly press ▲ or ▼ until you reach the desired level (0 to 30 FT).

12. Press **ENTER**. FRONT appears.

13. Press **SETUP** to exit.

Surround Effects

Important: The center and rear speakers only operate when the unit is set to a surround sound mode and the source material being played is recorded or broadcast in Dolby Digital, DTS or Dolby Pro Logic surround sound.

Stereo broadcasts or recordings will produce some rear channel effects when played in a surround mode. However, mono sources will not produce any sound from the rear speakers.

Changing System Settings - Special Circumstances

When you make a copy of DVD/CD via TAPE output, set the front speaker size to F-LARGE. Set the surround mode to STEREO.

USING THE REMOTE CONTROL UNIT TO CONTROL ADDITIONAL COMPONENTS

You can set your remote control to control other components such as a VCR, TV, satellite receiver or cable box.

1. Turn on the component to be programmed.

2. Look up the brand and corresponding code(s) in the code list (see “Manuracturer’s Codes” on Page 23).

3. While holding down the appropriate source button (**VCR**, **TV**, or **SAT**) on the remote control, use the number keys enter the first code from the code list.

4. Release the component button, then press **POWER**.

   If you have entered the correct code, the component turns off.

   If the component does not turn off, repeat Steps 3 and 4 and subustitute use the next code (if available) listed for the brand of your component until the component responds to the remote command.

Note: To turn on or off the receiver when you select the VCR, SAT, or TV function, press **POWER** twice.

Cautions:

- This remote control unit may not operate on all models of the brands shown.
- If batteries are removed from the battery compartment of the remote unit, replace the batteries within 30 minutes or the codes are lost. You must then re-enter all previously programmed codes.
- The buttons on the remote control unit may not work correspondingly with those on the components brands.
- Experiment with the remote control and your components to see which buttons work. If only a few functions operate, repeat Step 4 to see if another code operates more buttons.

CONTROLLING THE TUNER

1. Press **POWER**. The last selected function appears.

2. Press **TUNER**.

3. Press **BAND** to select the desired band.

4. Repeatedly press **TUNING/PRESET** ⏮ or ⏭ to tune in the desired station.

   To change the frequency by one step, press **TUNING/PRESET** ⏮ or ⏭ quickly (less than half a second).

   To tune to the next clear frequency, hold down **TUNING/PRESET** ⏮ or ⏭, then release the button. The system automatically tunes to the next strong station.

Listening To FM Stereo Broadcasts

In FM mode, press **FM MODE** to select stereo or mono. When you select the stereo mode, ST appears to the right of Tuned. It goes off when you select mono.

When you listen to very weak FM stereo stations, you might hear higher-than-normal background hiss. Switch to mono to eliminate the hiss.

Presetting Radio Stations

You can preset 30 AM and 30 FM stations regardless of the reception. Tune in the desired stations using auto or manual tuning.

Manual Preset

1. Press **BAND** to select the desired band.

2. Repeatedly press **TUNING/PRESET** ⏮ or ⏭ to tune in the desired station.

   To change the frequency by one step, press **TUNING/PRESET** ⏮ or ⏭ quickly (less than half a second).

   To tune to the next clear frequency, hold down **TUNING/PRESET** ⏮ or ⏭, then release the button. The system automatically tunes to the next strong station.

3. Press **MEMORY**. MEMO flashes for 5 seconds. When MEMO goes off, press the button again (MEMO flashes again).

4. Select the preset number with **TUNING/PRESET** ⏮ or ⏭.

5. Press **MEMORY** again.

6. Repeat Steps 1–5 to memorize other stations (up to 30 stations for each band). If you store a new station on a memory number in which a station is stored, the old station is cleared.

To store stations on the other band, repeat Steps 1–6, substituting the other band in Step 1.

Note: If you want to store more stations later, you might find that pressing **TUNING/PRESET** ⏮ or ⏭ only moves the tuner to the next preset station (instead of moving the frequency one step). If this happens, press **TUNING MODE** to return to manual tuning (see “Switching Between Preset Stations and Manual Tuning”).

Auto Preset

1. Press **BAND** to select the desired band.
2. Hold down **MEMORY** for about 3 seconds.
3. The tuner automatically begins scanning, and stores the first 30 strong signals it receives.
4. Scanning stops automatically after radio stations have been stored in the auto preset memory.

   Note: Press **MEMO** again to stop auto scanning earlier.

To store stations on the other band, repeat Steps 1–4, substituting the other band in Step 1.

Listening to Preset Stations

To listen to a radio station stored in the station memory, press **TUNING MODE** then **TUNING/PRESET** ⏮ or ⏭.

Switching Between Preset Stations and Manual Tuning

If you store preset stations, pressing **TUNING/PRESET** ⏮ or ⏭ scrolls through the preset stations, rather than changing the frequency station by station.

To switch to scrolling by individual stations, press **TUNING MODE**, then repeatedly press **TUNING/PRESET** ⏮ or ⏭ quickly to change the frequency by one step. Or hold down **TUNING/PRESET** ⏪ or ⏩ to tune to the next clear station.

To switch back to scrolling through the preset stations, press **TUNING MODE**, then repeatedly press **TUNING/PRESET** ⏮ or ⏭ until you reach the desired station.

CONTROLLING THE CD PLAYER

You can use the receiver's 3-DVD changer to listen to audio CDs.

Important: You can only use audio CDs and some CD-Rs with the reciever. CD-ROM, CD-G, photo CD, and CD-i discs can not be played on this player.

1. Press **POWER**.
2. Press **DVD**.
3. On the receiver, press **DISC 1**, **DISC 2**, or **DISC 3** to open the desired drawer.
4. Place the desired CDs in the tray, then press the appropriate DISC button again to close the drawer.

   Note: If you want to load more than one CD, you can press another DISC button. The receiver closes the open drawer and opens the drawer of the DISC button you pressed.
5. To select a CD, repeatedly press **DISC SKIP** until the desired CD's number blinks.
6. To play, press **BAND/** ▶ .

   To pause playback, press (**pause icon**). To resume playback, press **(pause icon)** again or press **BAND/** ▶ .

   To move forward through a track, hold down **TUNING/PRESET** ⏭ for about 2 seconds. Repeat up to two times to increase the fast-forward speed. To resume playback, press **BAND/** ▶ .

   To move backward through a track, hold down **TUNING/PRESET** ⏮ for about 2 seconds. Repeat up to two times to increase the rewind speed. To resume playback, press **BAND/** ▶ .

   Note: At the beginning or end of a track on an audio CD, the scan speed returns to normal.

   To skip to the next track on the CD, press **TUNING/PRESET** ⏭ once.

   To return to the beginning of the current track, press **TUNING/ PRESET** ⏮.

   To return to the previous track, press **TUNING/PRESET** ⏮ twice.

   To stop playback, press **FM MODE/** ■. The disc icon stops rotating, and **RESUME** appears. To resume playback, press **BAND/** ▶ . To stop playback completely, press **FM MODE/** ■ again.

Changing the Sound Mode

For a surround mode, repeatedly press **SURROUND** until the desired mode (**THEATER**, **HALL**, **STADIUM**, **STEREO**, or **PRO LOGIC**) appears.

Note: Dolby Digital and DTS modes do not work with CDs.

Using GUI Menu Icons

GUI menu icons show the current track number and elapsed time of a CD. Some icons only show the indicated information. Other icons allow the settings to be changed.

Important: You must turn on your television to view the GUI menu icons.

Follow these steps to view or change GUI information.

1. Press **GUI** during playback. Icons of the current track number and the elapsed time appear.
2. Press the remote's ◀ or ▶ to select the desired item. The currently selected item is highlighted.

   The first icon is the track icon. If you select it, you can jump to the desired track number by pressing the number keys and **ENTER**, or by pressing ⏮ or ⏭.

   The second icon is the time icon. It shows the elapsed time. You cannot change it. It is only for viewing.

Repeat Play

Press **REPEAT** during playback. Each time you press this button, the TV screen displays the repeat mode setting and the disc will repeat a track.

The repeat mode changes between **REPEAT ONE**, **REPEAT ALL**, **REPEAT ALL DISCS**, and **REPEAT OFF** as you press the button.

To return to normal play, press **REPEAT** several times until **REPEAT OFF** appears.

Note: Repeat play works only with discs for which the elapsed playing time appears in the display window during playback.

Programming Tracks

This function allows you to program up to 32 tracks for playback in any desired order. This function only operates with audio CDs (not DVDs).

Note: The disc must be recognized by the receiver, so play the disc for a little while after loading, then program it.

1. Press **FM MODE/** ■ to stop the CD.
2. Press **PROGRAM**. 01 – – appears.
3. Repeatedly press **DISC SKIP** to select the desired CD (if necessary). The CD number appears to the far right of the display.
4. Press the appropriate numeric buttons, then press **ENTER** to program the first desired track.
5. Repeat Steps 2–4 to program more tracks.

To check the programmed order, press **STOP** twice. Repeatedly press ▲ or ▼ to view the programmed order.

To clear the programming, press **STOP** twice, then press **CLEAR**.

Notes:

- If you try to select more than 32 tracks, **FULL** appears and you cannot program any more tracks.
- If you press **PROGRAM** twice successively while programming, the programming stops and **P-OFF** appears.
- Press **BAND/** ▶ to start program playback.

Modifying the Program and Adding a Track

1. Press **STOP** twice. You cannot modify the programming in Resume Mode.
2. Repeatedly press ▲ or ▼ to select the desired programmed track.

   To clear the track, press **CLEAR**.

   To change the track to another track, press the numeric buttons, then **ENTER.**

   To change the track to a track on another disc, press **DISC SKIP**, the numeric buttons, then **ENTER**.

   To add a track, repeatedly press ▲ or ▼ until you reach the last programmed track. Press ▲ or ▼ again. Enter the appropriate numeric buttons, then press **ENTER** to program the desired track.
3. To start program playback again, press **PROGRAM**, then **BAND/** ▶.

Note: The programmed contents are lost if you turn off the unit or change the function.

Random Play

Press **RANDOM**. The unit randomly selects trucks.

Note: Pressing **RANDOM** also clears any programming.

CONTROLLING THE SLEEP TIMER

You can set the sleep timer to turn off the receiver after a set period of time.

Repeatedly press **SLEEP** to set the sleep timer to the desired time (10, 20, 30, 40, 50, 60, 70, 80, or 90 minutes). The receiver turns off when the selected time has expired.

❒ DVD Player Operation

BASIC PLAYBACK

1. Press **POWER**. The last selected function appears.

2. If necessary, press the remote's **DVD** or rotate the receiver's **FUNCTION** until DVD appears.

3. Press **DISC 1**, **DISC 2**, or **DISC 3** to open the desired disc tray. OPEN appears and the corresponding disc indicator (1, 2, or 3) flashes.

   Note: The disc indicator 1, 2, or 3 lights even the disc is not in the tray until the unit check the tray after the receiver's **PLAY** or the remote's **BAND/ ▶** is pressed.

4. Place a disc on the disc tray with the playback side down. Place the disc in the correct guide on the disc tray. If the disc is out of the guide, it may damage the disc and cause the DVD player to malfunction.

   Notes:

   - If you leave the disc tray open for more than 8 minutes, the disc tray automatically closes.
   - If you leave the disc tray open, the disc tray automatically closes when the function mode is changed.

5. Press the receiver's **PLAY** or the remote's **BAND/ ▶**. PLAY appears. The disc tray automatically closes and the receiver loads the disc. After loading the disc, the receiver enters menu mode.

   Note: If you close the tray by pressing **DISC 1**, **DISC 2**, or **DISC 3**, the receiver does not load the disc. Press **PLAY** to load the disc.

6. To select another disc, repeatedly press **DISC SKIP** on the remote or the receiver until the desired disc loads.

   Note: After playing back all of the chapters in the title, the DVD player automatically stops and returns to the menu screen.

7. When the menu screen appears on your television screen, press the remote's ◀, ▶, ▲, or ▼ to select the Play Movie option, then press the remote's **BAND/ ▶** or the receiver's **PLAY**. The receiver begins playback.

Cautions:

- Do not move the DVD player during playback. Doing so may damage the disc and the unit.
- Use **DISC 1**, **DISC 2**, or **DISC 3** on the main unit to open or close the disc trays. Do not push the disc tray while it is moving. Doing so may cause the DVD player to malfunction.
- Do not push on the disc tray or put any objects other than discs on the disc tray. Doing so may cause the DVD player to malfunction.
- Keep your fingers well clear of the disc tray as it is closing. Keep children's fingers away from the closing disc tray as there is a risk of personal injury.
- When the inhibit icon appears on the TV screen while a button is pressed, it means that the function is not available on the disc you are playing.
- .Depending on the DVD disc, some operations may be different or restricted. Refer to the jacket or case of the disc you are playing.

Stopping Play

Press the receiver's **STOP** or the remote's **FM MODE/■**. When play is stopped, the receiver remains at the point where the receiver's **STOP** or the remote's **FM MODE/■** was pressed, and RESUME appears.

Press the receiver's **STOP** or the remote's **FM MODE/■** again to stop. The resume option is cleared when the receiver's **STOP** or the remote's **FM MODE/■** is pressed the second time. **Note:** The resume option is also cleared when the power is turned off and then on.

Press the receiver's **PLAY** or the remote's **BAND/ ▶** to resume the playback from this point.

Notes:

- The resume option works only with discs for which the elapsed playing time appears on the window display during playback.
- Opening the disc tray cancels the resume option.
- The resume option may not be available on some DVD discs.

Pausing Play

Press the receiver's **II** or the remote's **MEMORY/ II**.

To resume normal playback, press the receiver's **PLAY** or the remote's **BAND/ ▶**.

Advancing by Frames

Press the receiver's **II** or the remote's **MEMORY/ II** while the DVD is paused. Each time you press the receiver's **II** or the remote's **MEMORY/ II**, the picture advances one frame.

To resume normal playback, press the receiver's **PLAY** or the remote's **BAND/ ▶**.

Playing in Slow-Motion

Press the remote's **SLOW – /+** during playback. During slow playback, the playback speed and direction can be selected with **SLOW – /+**.

To decrease the playback speed, repeatedly press **SLOW –**.

To reverse the playback direction, press **SLOW +** to the playback direction. As you press the button the playback speed changes 1/2, 1/4, 1/8.

To return to normal playback, press the receiver's **PLAY** or the remote's **BAND/ ▶**.

Skipping Chapters

To skip forward, press **TUNING/PRESET** ⏭. The receiver skips forward one chapter each time the button is pressed.

To skip backward, press **TUNING/PRESET** ⏮. If you press **TUNING/PRESET** ⏮ once midway through a chapter, the receiver returns to the beginning of that chapter. The receiver then skips backward one chapter each subsequent time you press **TUNING/PRESET** ⏮.

Scanning

To scan forward through a DVD, hold down the remote's **TUNING/PRESET** ⏭ or the receiver's **TUNING/PRESET** ⏭⏭ for more than 1 second. Repeat up to three times to increase the fast-forward speed (2X, 4X, 16X, or 100X). To resume playback, press the receiver's **PLAY** or the remote's **BAND/** ▶ .

To scan backward through a DVD, hold down the remote's **TUNING/PRESET** ⏮ or the receiver's **TUNING/PRESET** ⏮ ◀◀ for more than 1 second. Repeat up to three times to increase the fast-reverse speed (2X, 4X, 16X, or 100X). To resume playback, press the receiver's **PLAY** or the remote's **BAND/** ▶ .

Notes:

- The DVD player does not play back sound during slow-motion, high-speed-reverse, or high-speed-forward playback of DVDs.
- Subtitles do not appear on the screen during slow motion or scan playback.
- The DVD player provides four scan speeds in each direction for DVD movie play.
- The DVD player does not play back in slow-motion in case of audio CD.
- In some equipment connected to digital output for DTS sound, a noise can be heard during fast-forward or fast-reverse playback of DTS DVDs.

ADVANCED FEATURES

Note: For the advanced features, the receiver's display screen does not change. The displays appear on your television screen.

Using GUI Menu Icons

GUI menu icons show disc information (for example, title or chapter number, elapsed playing time, audio/subtitle language, angle) and player information (for example, repeat play, play mode).

Some icons only show the indicated information. Other icons allow the settings to be changed.

Follow these steps to view or change GUI information.

1. Press **GUI** during playback.

   Note: Title function can also be accessed from the stop mode.

   Icons of the current title number, current chapter number, elapsed time, the current audio soundtrack language, current subtitle language, and current angle number appear.

   Below each icon is the current information for that menu (for example, 2 appears under the chapter icon when you are watching the movie's second chapter).

   Note: Some DVDs might not provide all of the above GUI menu icons.

2. Press the remote's ◀ or ▶ to select the desired item. The currently selected item is highlighted.

   The first icon is the title icon. When you select it , you can jump to the desired title number by pressing the remote's number keys, then **ENTER**.

   The second icon is the chapter icon. When you select it, you can jump to the desired chapter number by pressing the remote's number keys, then **ENTER**, or by pressing ◀ or ▶ .

   The third icon is the time icon. When you select it, you can move to a desired time in the movie by pressing the number keys, then **ENTER**.

   The fourth icon is the audio icon. When you select it, you can change the soundtrack language by repeatedly pressing **AUDIO** until the desired language appears. To select the current setting, press **ENTER**.

   The fifth icon is the subtitle icon. When you select it, you can change the subtitle language by repeatedly pressing **SUB TITLE** until the desired language appears. To select the current setting, press **ENTER**.

   The last icon is the angle icon. When you select it, you can change the angle by repeatedly pressing **ANGLE** until the desired number appears. To select the current setting, press **ENTER**.

Using a Title Menu

Some DVDs may contain two or more titles. If the disc has a title menu recorded on it, you can use **TITLE** to select the movie title.

Notes:

- The details of operation differ depending on the DVD.
- Selecting a title may not be possible on certain DVD discs.

Follow these steps to select a movie title.

1. Press **TITLE**. A list of the DVD's titles appears.
2. Press **BAND/** ▶ or **ENTER** to resume play from the scene when **TITLE** was first pressed.
3. Press the remote's ▲ , ▼ , ◀ , or ▶ , then **ENTER** or **BAND/** ▶ . Or press the numeric button(s), to select the desired title. The selected title now starts playing.

Using a DVD Menu

Some DVDs have unique menus called DVD menus. For example, DVDs programmed with complex contents provide guide menus, and those recorded with various languages provide menus for audio and subtitle language.

The DVD menu's contents and operation differ from disc to disc. The following procedure explains the basic operation when this feature is used.

Press **MENU** during play. The DVD menu available on the disc now appears. Pressing **RETURN** resumes play from the scene when **MENU** was first pressed.

Note: The resume play option might not be possible on certain discs.

Press the remote's ▲, ▼, ◀, or ▶, then **ENTER**. Or press the numeric button(s) to select the desired item. The selected item is now executed.

Changing Subtitle Language

Note: This operation works only with DVDs on which multiple subtitle languages are recorded.

Press **SUB TITLE** during playback. When no subtitles are recorded, **OFF** appears instead of the language number. Repeatedly press **SUB TITLE** until the desired language is selected.

To eliminate subtitles, repeatedly press **SUB TITLE** and select **OFF**.

Notes:

- When the desired language is not selected even after pressing the button several times, it means that the language is not available on the disc.
- When the power is turned off or the DVD player is stopped, the subtitle language selected at the initial settings appears.

Changing Soundtrack Language

Note: This operation works only with DVDs on which multiple soundtrack languages are recorded.

Press **AUDIO** during play. The currently selected soundtrack language appears. Repeatedly press **AUDIO** until the desired language is selected.

Notes:

- When the desired language is not selected even after pressing the button several times, it means that the language is not available on the disc.
- When the power is turned off or the DVD player is stopped, the language heard is the one selected at the initial settings.

Viewing from Another Angle

Some DVDs may contain scenes which have been shot simultaneously from a number of different angles. For these discs, the same scene can be viewed from each of these different angles using **ANGLE**. The recorded angles differ depending on the disc.

Press **ANGLE** during playback. The currently selected angle appears. Repeatedly press **ANGLE** until the desired angle is selected.

Note: This function only works for discs having scenes recorded at different angles.

Using Repeat Play

Press **REPEAT** during playback. Each time you press this button, the TV screen displays the repeat mode setting and the disc will repeat a chapter or title.

The repeat mode changes between **CHAPTER REPEAT**, **TITLE REPEAT**, and **REPEAT OFF** as you press the button.

To return to normal play, press **REPEAT** several times until OFF appears.

Notes:

- .Repeat Play works only with discs for which the elapsed playing time appears in the DVD display window during playback.
- Repeat Play may not work correctly with some DVDs.

Zooming In

The Zoom feature allows you to zoom in and enlarge the picture on the screen to either 4 times (X4) or 16 times (X16) its normal size.

Press **ZOOM** during normal playback or still playback.

To resume normal size, press **ZOOM** to cancel the zoom feature and resume normal playback or still playback.

Notes:

- Some DVDs may not respond to the zoom feature.
- The zoom feature does not work on subtitles or menus included on DVD video discs.

SETTING RATING LEVEL AND PASSWORD

This is to prohibit the playing of specified DVDs which are unsuitable for children. Some DVD discs contain a restriction level which enables parents to remove scenes or prevent playback of discs by children. The DVD player is equipped with a password device designed to prevent children from changing the level.

Selecting a Rating Level

1. Press **DVD SET UP**.
2. At the setup screen, press ▲ or ▼ to select **RATING**, then press **ENTER**.

   Note: The password is set to 1,2,3,4 as a default. The rating is set to unlock as a default.
3. Enter a password and press **ENTER**.
4. Repeatedly press **ENTER** to select the desired level.

   You cannot play DVD video discs rated higher than the level you selected unless you cancel the parental lock function. For example, when you select level 7, discs rated higher than level 7 are blocked and cannot be played.

   The parent lock level is equivalent to the following USA movie ratings.

Level	Movie Rating
7	NC-17
6	R
4	PG-13
3	PG
1	G

5. Press **DVD SET UP** to exit.

Notes:

- Some titles do not match with the rating level described as above.
- If you change the level and enter a password, playback of all DVDs with ratings higher than your selection will be blocked, unless you enter the correct password again. For example: if you change the level to 5, the DVD player will not play discs with ratings of 6, 7, or 8 unless the correct password is entered from the remote control.

Setting a Password

If you change the rating level to 7 or lower, you must enter a 4-digit password to access playback of discs with higher ratings.

To set this password, follow these steps.

1. Press **DVD SET UP**.
2. At the setup screen, press ▼ to select **PASSWORD**, then press **ENTER**.
3. Type a 4-digit password into **OLD**. (For example, 1234).

   Important: Do not forget your password.
4. Type same the 4-digit password into **NEW**, then press **ENTER**.

Clearing Your Password

If you forget your password, you can clear the current password.

At the SETUP screen, press ▼ to select **PASSWORD**, then press **ENTER**.

Enter 4-digit number (for example, 2850), then press **ENTER**. The 4-digit password is cleared.

SELECTING TV ASPECT

Select the appropriate screen type according to your TV set. Conventional size screens use a 4:3 aspect ratio, and wide-screens use a 16:9 ratio.

1. Press **DVD SET UP**.
2. At the setup screen, press ▲ or ▼ to select **TV DISPLAY**, then press **ENTER**.
3. Repeatedly press **ENTER** to select the desired aspect, then press **DVD SET UP**. You must select the type of TV picture (aspect ratio) that corresponds to the type of TV you are connecting to the DVD unit.

   4:3 PS (Pan & Scan) — If you have a conventional TV set and your DVD is not formatted for widescreen viewing, use this setting.

   4:3 LB (Letterbox) — If you have a conventional TV set and your DVD is formatted for widescreen viewing, use this setting. All video material not formatted in the Pan & Scan style is played back in the letterbox style. Black bands appear at top and bottom of screen.

   16:9 WIDE (Widescreen) — If you have a wide-screen TV set, use this setting. The DVD plays in full size. (You must also set your widescreen TV to “full size”).

SELECTING DIGITAL AUDIO OUT

Each DVD has a variety of audio output options. If you connected a device to the receiver’s digital optical jacks (see “Connecting a Digital Optical Audio Devices” on Page 7), you might have to change the digital audio output setting. Set the player’s Digital Audio Output according to the type of audio system you use.

1. Press **DVD SET UP**.
2. At the setup screen, press ▲ or ▼ to select **DIGITAL OUT**.
3. Repeatedly press **ENTER** to select the desired output (**PCM** or **BITSTREAM**) , then press **ENTER**.

   BITSTREAM — Select **BITSTREAM** if you have an amplifier or other equipment with DTS decoder or Dolby Digital decoder connected to the receiver.

   PCM — Select **PCM** if you have an amplifier or other equipment with linear PCM only (or a MD recorder or a DAT deck) connected to the receiver.

Caution: If an active digital audio output signal is supplied to an receiver or other equipment without a corresponding digital decoding capability, a very loud noise may be produced which could permanently damage the speakers.

Note: When you make a digital recording from CD to your house audio CD recorder entire CD tracks are recorded as 1 track. This is because there is no track information.

❒ Troubleshooting

This receiver has been manufactured to the specifications of RadioShack and is covered by a limited warranty from RadioShack. If your receiver is not operating as it should, take it to your local RadioShack store or call 1-800-THE-SHACK for assistance.

Incorrect operation is often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.

Symptom	Cause	Remedy
No power.	The power cord is disconnected.	Plug the power cord into the wall outlet securely.
The power is on, but the DVD player does not work.	No disc is inserted.	Insert a disc. (Check that the DVD or audio CD indicator in the DVD display is lit.)
No picture.	The TV is not set to receive DVD signal output.	Select the appropriate video input mode on the TV so the picture from the DVD player appears on the TV screen.
	The video cable is not connected securely.	Connect the video cable into the jacks securely.
	The connected TV power is turned off.	Turn on the TV.
The playback picture is poor.	The disc is dirty.	Clean the disc.
The DVD player does not start playback.	No disc is inserted.	Insert a disc. (Check that the DVD or audio CD indicator in the DVD display is lit.)
	An unplayable disc is inserted.	Insert a playable disc. (Check the disc type, color system and regional code.)
	The disc is placed upside down.	Place the disc with the playback side down.
	The disc is not placed within the guide.	Place the disc on the disc tray correctly inside the guide.
	The disc is dirty.	Clean the disc.
	A menu is on the TV screen.	Press **SETUP** to turn off the menu screen.
	The rating level is set.	Cancel the rating function or change the rating level.
The remote control does not work properly.	The remote control is not pointed at the remote sensor of the unit.	Point the remote control at the remote sensor of the unit.
	The remote control is too far from the unit.	Operate the remote control within about 23 ft (7 m).
	There is an obstacle in the path of the remote control and the DVD player.	Remove the obstacle.
	The remote's batteries are exhausted.	Replace the batteries with new ones.
The receiver does not respond when the buttons are pressed.	Static electricity caused by dry air.	Disconnect the power plug from the outlet, and insert again.
No sound is output when a function is selected.	Improper connections	Make sure the component is connected correctly.
	Sound is muted.	Press the remote's **MUTE**.
	The volume is turned down.	Adjust **VOLUME**.
No image is output when a function is selected.	Improper connections.	Make sure the component is connected correctly.
	The input source is not properly selected.	Press the correct function button.
Considerable noise in radio broadcasts.	Incorrect frequency.	Tune in the correct frequency.
	The antenna is not connected.	Connect the antenna.
	RF (AC-3) and/ or digital cables are near the antenna terminals and wires.	Route RF (AC-3) and digital cables away from the antenna terminals and wires.
	(For FM) The FM antennais not fully extended or is poorly positioned.	Fully extend the FM wire antenna, position for best reception, and secure to a wall.
	(For FM) The signal is weak.	Connect an outdoor FM antenna.
	(For AM) The AM antenna is poorly positioned.	Adjust the direction and position for best reception.
	(For AM) The signal is weak.	Connect an additional internal or external AM antenna.
	Interference caused by other equipment (for example, flourescent lights, motors).	Turn off the equipment causing the noise or move it away from the receiver.
		Place the antenna farther away from the equipment causing the noise.
Broadcast stations cannot be selected automatically.	The signals are weak.	Connect an outdoor antenna.
The display is dark or off.	The dimmer is on.	Press **DIMMER** repeatedly to return to the default setting.

Symptom	Cause	Remedy
When listening to the music in stereo, left/right speakers sounds are reversed.	Speakers are connected wrong.	After checking, if needed, reconnect.
Low hum or buzz sound.	Power line of a fluorescent light is installed near this product.	Place this product as far away as possible from electric devices with interference.
Sound is only heard from one channel.	One of the input cords is disconnected.	Connect the input cords securely.
	The speaker level is set to one side.	Adjust the speaker level.
Sound cuts off or there is no sound even though power is on.	Speaker impedance is less than prescribed for this unit.	After turning off the power and then turning it on again, reduce the volume or change to the correct 6-ohm speakers.
Low bass response.	Speaker polarity(+/–) is reversed.	Check all speakers for correct polarity.
No sound from the rear speakers.	Surround Mode is set to **STEREO**.	Set the mode to the desired surround mode position.
	Source being played is not recorded or broadcast in surround sound or stereo.	Use surround or stereo source.
	One or more rear speaker wires is not making good contact,	Check all rear speaker wires for good connection.
No sound from the center speaker.	Surround Mode is not set to **DTS**, **DOLBY DIGITAL**, **DOLBY PRO LOGIC** or **STEREO**.	Set Surround Mode to **DTS**, **DOLBY DIGITAL**, **DOLBY PRO LOGIC** or **STEREO**.

If the receiver does not operate normally due to external effects such as static electricity, disconnect the power plug from the outlet and insert again to return to normal operating conditions.

CARE

Keep the receiver dry; if it gets wet, wipe it dry immediately. Use and store the receiver only in normal temperature environments. Handle the receiver carefully; do not drop it. Keep the receiver away from dust and dirt, and wipe it with a damp cloth occasionally to keep it looking new.

Modifying or tampering with the receiver's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your receiver is not performing as it should, take it to your local RadioShack store for assistance.

Caution: You might permanently damage your speakers by cleaning them with a vacuum cleaner. Use a feather duster or a soft loose cloth instead.

❒ Manuracturer's Codes

TV Codes

Brand	Codes
ABEX	272
ADMIRAL	101
AKAI	102
ALLERON	146
AMTRON	138
AOC	104,105,106,107
AUDIOVOX	138
BELCOR	104
BELL & HOWELL	101, 262
BRADFORD	138
BROKWOOD	104
CANDLE	104, 106, 108
CELEBRITY	102
CITIZEN	104, 106, 108, 138, 205, 271
COLORTYME	104, 106
CONCERTO	104, 106
CONTEC/CONY	112, 113, 138
CRAIG	138
CROWN	138, 271
CURTIS MATHES	104, 106, 115, 185, 205, 262, 271
CXC	138
DAEWOO	104, 105, 106, 117, 118, 271
DAYTRON	104, 106, 271
DIMENSIA	185
DUMONT	104
ELECTROBAND	102
ELECTROHOME	103, 104, 106, 119, 122
EMERSON	104, 106, 112, 124, 125, 126, 127, 128, 129, 130, 131, 132, 134, 135, 136, 138, 139, 141, 142, 146, 262, 271, 279
ENVISION	104, 106
FISHER	148, 149, 151, 262, 280
FUJITSO	146
FUNAI	138, 146
FUTURETEC	138
GE	103, 104, 106, 110, 119, 121, 122, 152, 154, 155, 185, 187, 200, 221, 230, 264, 265, 281
GIBRALTER	104
GRUNDY	138, 146, 271
HALLMARK	104, 106
HARVARD	138
HITACHI	104, 106, 110, 112, 113, 119, 140, 159, 160, 214, 235, 236, 237, 238, 239, 240, 242, 243, 244, 245, 246, 248, 279
IMA	138
INFINITY	162
JBL	162
JC PENNY	104, 105, 106, 108, 122, 152, 154, 158, 163, 172, 185, 187, 205, 228, 271, 272, 281
JCB	102
JENSEN	104, 106
JVC	112, 113, 154, 156, 160, 165, 166, 167, 189, 257, 258, 259
KAWASHO	102, 104, 106
KENWOOD	104, 106, 119
KLOSS NOVABEAM	169, 283
KTV	138, 271
LG (GOLDSTAR)	104, 105, 106, 112, 119, 156, 158, 255, 256, 271, 272
LOEWE	162
LUXMAN	104, 106
LXI	106, 149, 162, 172, 185, 262, 281
MAGNAVOX	104, 106, 108, 119, 162, 169, 174, 175, 176, 177, 188, 189, 226, 230, 231, 232, 233, 234, 254, 283, 284
MARANTS	162
MARANTZ	104, 106, 162
MEGATRON	106, 159
MEMOREX	101, 106, 182, 262
MGA	104, 105, 106, 119, 122, 151, 179, 180, 182
MIDLAND	154, 271, 272, 281
MINUTZ	152
MITSUBISHI	104, 105, 106, 119, 122, 151, 179, 180, 181, 182, 210, 221, 225
MOTOROLA	103
MTC	104, 105, 106, 205
MULTITECH	138
MULTIVISION	184
NAD	106, 172
NEC	103, 104, 105, 106, 189
NIKKO	106
ONWA	138
ORION	135
PANASONIC	103, 154, 162, 230, 270
PHILCO	103, 104, 105, 106, 108, 112, 119, 162, 169, 174, 175, 177, 283, 284
PHILIPS	103, 104, 108, 112, 119, 162, 169, 174, 175, 176, 186, 187, 188, 189, 230
PILOT	104, 271
PIONEER	104, 106, 190, 191, 192, 279
PORTLAND	104, 105, 106, 271
PRICE CLUB	205
PRISM	154
PROSCAN	185, 281
PROTON	104, 106, 112
PULSER	104

Brand	Codes
QUASAR	103, 154
RADIOSHACK/REALISTIC	104, 106, 112, 138, 149, 185, 262, 271, 272
RCA	103, 104, 105, 106, 107, 110, 119, 120, 121, 135, 156, 185, 198, 199, 200, 201, 202, 210, 221, 279, 281, 287, 290
SAMPO	104, 106, 271, 272
SAMSUNG	104, 105, 106, 112, 115, 119, 204, 205, 206, 271, 272
SAMSUX	271
SANYO	104, 109, 148, 149, 180, 207, 208, 210, 262, 280
SCOTCH	106
SCOTT	104, 106, 112, 124, 135, 138, 146
SEARS	104, 106, 113, 119, 146, 148, 149, 151, 166, 172, 185, 209, 210, 262, 280, 281
SHARP	104, 106, 112, 129, 211, 212, 213, 221, 222, 271
SHOGUN	104
SIGNATURE	101
SIMPSON	108
SONY	102
SOUNDESIGN	104, 106, 108, 138, 146
SSS	104, 138
STARLITE	138
SUPREME	102
SYLVANIA	104, 106, 108, 119, 162, 169, 174, 175, 176, 177, 188, 283, 284
SYMPHONIC	138
TATUNG	103
TECHNICS	154
TECHWOOD	104, 106, 154
TEKNIKA	104, 105, 106, 108, 112, 113, 138, 146, 176, 182
TELECAPTION	205, 270, 271
TOSHIBA	149, 172, 189, 205, 209, 210, 217, 218, 221, 260, 262
UNIVERSAL	152, 187
VICTOR	166
VIDTECH	104, 105, 106
WARDS	101, 104, 105, 106, 107, 124, 146, 152, 162, 169, 174, 175, 176, 185, 187, 188, 219, 220, 284
YANAHA	104, 105, 106, 119
ZENITH	104, 247, 253, 254

VCR Codes

Brand	Codes
ADMIRAL	531
ADVENTURA	426
AIWA	426
AKAI	403, 404, 512, 513
AMERICAN HIGH	421
ASHA	413
AUDIO DYNAMICS	409, 410
AUDIOVOX	414
BEAUMARK	413
BELL&HOWELL	411
CALIX	414
CANDLE	413, 414, 423, 461
CANON	421
CARVER	462
CCE	461
CITIZEN	413, 414, 415, 416, 417, 418
COLORTYME	409
COLT	461
CRAIG	413, 414, 423, 461
CURTIS-MATHES	409, 412, 413, 416, 418, 421, 515
CYBERNEX	413
DAEWOO	415, 417, 426, 428
DBX	409, 410
DIMENSIA	412
DYNATECH	426
ELECTROHOME	414, 429
ELECTROPHONIC	414
EMERSON	414, 415, 421, 426, 429, 430, 432, 433, 435, 436, 437, 438, 439, 440, 441, 442, 444, 445, 465, 513, 516, 517, 530
FISHER	405, 411, 419, 423, 448, 449, 450, 451, 518
FUJI	421, 519
FUNAI	426
GARRARD	426
GE	401, 412, 413, 421, 453, 515, 520
GRADIENTE	426
HARLEY DAVIDSON	426
HARMAN KARDON	409
HARWOOD	461
HEADQUARTER	411
HI-Q	423
HITACHI	421, 455, 456, 457, 489, 497, 507, 511, 520, 522
INSTANT REPLAY	421
JC PENNEY	409, 410, 411, 413, 414, 421, 455, 456, 458, 459, 460, 507, 518
JCI	421
JENSEN	455, 456, 511
JVC	409, 410, 411, 418, 420, 421, 458, 462, 468, 477, 511, 523
KENWOOD	409, 410, 411, 416, 418, 456, 511, 523
KLH	461
KODAK	414, 421
LG (GOLDSTAR)	409, 414, 418, 454, 506
LLOYD	426
LOGIK	461
LXI	414
MAGNAVOX	421, 462, 463, 504, 508, 524

Brand	Codes
MAGNIN	413
MARANTZ	409, 410, 411, 416, 418, 421, 458, 462
MARTA	414
MASUSHITA	421
MEI	421
MEMOREX	411, 413, 414, 421, 423, 426, 504, 531
MGA	429, 465, 513
MGGNAVOX	421, 449, 462, 504
MGN TECHOLOGY	413
MIDLAND	453
MINOLTA	455, 456, 507
MITSUBISHI	406, 407, 419, 421, 424, 429, 455, 456, 465, 466, 467, 469, 470, 471, 472, 473, 474, 506, 513, 523
MONTGOMERY WARD	531
MOTOROLA	421, 531
MTC	413, 426
MULTITECH	413, 416, 426, 453, 461
NEC	409, 410, 411, 416, 418, 458, 511, 523
NIKKO	414
NOBLEX	413
OLYMPUS	421
OPTIMUS	414, 421, 431, 446, 494, 509, 531
OPTONICA	496
ORION	435
PANASONIC	421, 446, 509, 525, 526, 531
PENTAX	416, 455, 456, 507, 520
PENTEX RESEARCH	418
PHILCO	421, 462, 463
PHILIPS	421, 462, 496, 524
PILOT	414
PIONEER	410, 443, 455, 480, 481, 523
PORTLAND	416, 417
PROSCAN	401, 412
PROTEC	461
PULSAR	504
QUARTER	411
QUARTZ	411
QUASAR	421, 525
RADIOSHACK/REALISTIC	411, 413, 414, 421, 423, 426, 429, 449, 450, 496, 531
RADIX	414
RANDEX	414
RCA	401, 403, 412, 413, 415, 421, 431, 446, 448, 453, 454, 455, 456, 462, 482, 483, 484, 486, 487, 488, 489, 490, 491, 494, 507, 509, 515, 520, 525, 531
RICHO	528
RUNCO	504
SAMSUNG	413, 415, 433, 453
SANKY	504, 531
SANSUI	410, 511, 523
SANYO	405, 411, 413, 423
SCOTT	415, 432, 435, 438, 465, 493, 516
SEARS	401, 414, 421, 423, 448, 449, 450, 451, 455, 456, 507, 518
SHARP	417, 429, 431, 494, 495, 496, 531
SHINTOM	404, 456, 46, 498
SHOGUN	413
SIGNATURE	531
SINGER	421, 461, 528
SONY	404, 421, 425, 427, 434, 498, 499, 519, 528
STS	421, 507
SYLVANIA	421, 426, 462, 463, 465, 524
SYMPHONIC	426
TANDY	411, 106
TASHIKO	414, 113, 138
TATUNG	458, 511
TEAC	426, 458, 511
TECHINICS	421, 409
TEKNIKA	414, 421, 426
TMK	413
TOSHIBA	415, 449, 451, 455, 465, 493, 506, 516
TOTEVSION	413, 414
UNITECH	413
VECTOR RESEARCH	409, 410, 415, 416, 513
VIDEOSONIC	413
WARDS	413, 414, 415, 421, 423, 426, 429, 455, 456, 461, 496, 501, 502, 503, 507, 516, 531
XR-1000	421, 426, 461
YAMAHA	409, 410, 411, 418, 458, 511
ZENITH	404, 498, 504, 519, 528

Cable Codes

Brand	Codes
ABC	702, 703, 704, 705, 706, 709, 753
ANTRONIX	708, 709
ARCHER	708, 709, 710, 711
CABLETENNA	708
CABLEVIEW	708
CENTURY	711
CITIZEN	711
COLOUR VOICE	712, 713
COMTRONICS	714, 715
CONTEC	716
EASTERN	717
GARRARD	711
GC ELECTRONICS	709
GEMINI	718, 719, 749
GENERAL INSTRUMENTS	703
GRADIENT	781
HAMLIN	720, 721, 722, 735, 745

Brand	Codes
HITACHI	703
HYTEX	702
JASCO	711
JERROLD	703, 705, 707, 714, 718, 723, 724, 746, 753, 782, 783, 784, 785, 788, 789, 790, 791, 792
LG (GOLDSTAR)	770, 771, 779, 780
MAGNAVOX	725
MEMOREX	726
MOVIE TIME	702, 727, 728
NSC	702, 727, 728
OAK	702, 727, 728
PANASONIC	748, 752
PARAGON	726
PHILIPS	711, 712, 713, 714, 725, 730, 731, 732
PIONEER	701, 733, 734, 742
PULSAR	726
RADIOSHACK	770, 771, 779, 780
RCA	747, 749, 752
REALISTIC	709, 749
REGAL	722, 735
REGENCY	717
REMBRANDT	703
RUNCO	726
S.A	737, 738, 786, 787
SAMSUNG	714, 734
SCIENTIFIC ATALANTA	706, 736, 737, 738
SIGNAL	714, 718
SIGNATURE	703
SL MARX	714, 525
SPRUCER	752
STARCOM	707, 718, 753
STARGATE	714, 718
STARQUEST	718
TANDY	740
TELEVIEW	714
TOCOM	704, 723, 741
TOSHIBA	726
TSUA	718
TV86	727
UNIKA	708, 709, 711
UNITED ARTISTS	702
UNITED CABLE	753, 713
UNIVERSAL	708, 709, 710, 711
VIDEOWAY	744
VIEWSTAR	715, 725, 727, 740
ZENITH	726, 750, 751, 774, 777

SAT Codes

Brand	Codes
CHAPPARAL	756, 757
DRAKE	758, 759
ECHOSTAR	743
GE	778
GENERAL INSTRUMENTS	760, 761, 762
PANASONIC	757
PIONEER	739
PRIMESTAR DBS	776
PROSCAN	778
RCA	754, 755, 778
REALISTIC	763
SONY	772, 725, 727, 740
STS1	764
STS2	765
STS3	766
STS4	767
TODHIBA	768
UNIDEN	769

❒ Specifications

Amplifier Section

Output Power (6 ohms, 40 Hz ~ 20 kHz, 0.9% T.H.D) : Stereo ..... Front L/R (2 Channel Driven)100W x 2ch

Output Power (6 ohms, 1 kHz, 0.9% T.H.D)
- Front L/R (2 Channel Driven) ..... 100 W x 2ch
- Center (1 Channel Driven) ..... 100 W x 1ch
- Rear L/R (2 Channel Driven) ..... 100 W x 2ch
- Subwoofer (1 Channel Driven) ..... 100 W x 1ch

Distortion at 1 kHz, 100 W
- Front L/R ..... < 0.9%
- Center/Subwoofer ..... < 0.9%
- Rear L/R ..... < 0.9%

S/N Ratio (IHF-A Weighted)
- STEREO-TV (Line) ..... > 80 dB

S/N Ratio (IHF-A Weighted, -20dB FS)
- SURROUND Front ..... > 65 dB
- SURROUND Center ..... > 65 dB
- SURROUND Rear ..... > 65 dB

Frequency Response
- Front L/R ..... 10 - 20 kHz, -3 dB/+1 dB
- Center (Large) ..... 10 - 20 kHz, -3 dB/+1 dB
- Rear L/R ..... 10 - 20 kHz, -3 dB/+1 dB
- Subwoofer ..... 10 - 120 Hz, -3 dB

Tone Control
- Bass (100 Hz) ..... +/-10 dB
- Treble (10 kHz) ..... +/-10 dB

Input Sensitivity
- STEREO-TV (Line) ..... 320 mV
- Video (Monitor Output) ..... 1 Vpp/75 ohm

Output Level
- Audio (Tape REC OUT) ..... 280 mV/1 kohm
- Video (Monitor Out) ..... 1 Vpp/75 ohm

Cross-Talk (Separation)
- STEREO-TV (Line) ..... > 55 dB
- Dolby Digital ..... > 45 dB

Delay Time
- Dolby Pro Logic ..... Rear: 15 - 30 msec.
- Dolby Digital ..... Rear: 0 - 15 msec.
  Center : 0 - 5 msec.

Tuner Section

(FM) Frequency Range ..... 87.5 - 108 MHz

(FM) Sensitivity
- Mono (THD 3%) ..... 15 uV/m, EMF

(FM) Distortion (15 kHz LPF on)
- Mono ..... < 0.4%
- Stereo ..... < 0.5%

(FM) S/N Ratio
- Mono ..... > 68 dB
- Stereo ..... > 63 dB

(FM) Frequency Response ..... 20 - 15 kHz, -3 dB

(AM) Frequency Range ..... 520 - 1710 kHz

(AM) Sensitivity (Loop Antenna) ..... 600 uV/m

(AM) Selectivity, +/- 10K ..... > 25 dB

(AM) S/N Ratio ..... > 40 dB

Video Section

Output Level ..... 1.0 V (p-p), 75 ohm

S-Video Y-Output Level ..... 1.0 V(p-p), 75 ohm

S-Video C-Output Level ..... 286 mV(p-p), 75 ohm

S/N Ratio ..... > 45 dB

Speaker Section

Type

2 Way 2 Speakers Vented Enclosure ..... x 1 (Front, Surround)

2 Way 3 Speakers Vented Enclosure ..... x 1 (Center)

1 Way 2 Speakers Bandpass Enclosure ..... x 1 (Subwoofer)

Impedance ..... 6 ohm

Power Handling Capacity ..... 60 Watts RMS

Miscellaneous

Power Requirement ..... AC 120 V, 60 Hz

Power Consumption ..... ???????

Weight ..... 37 lb 1 oz (16.7 kg)

Dimension (W x H x D) ..... 16-15/16 × 5-8/16 × 15-12/16 inches (430 × 140 × 400 mm)

Accessories ..... Indoor FM Antenna (T Type)
Adapter for FM Antenna
AM Loop Antenna
Owner's Manual
Universal Remote Unit
Audio/Video Wire

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.