



HTR-5750/HTR-5740

AV Receiver

IMPORTANT SAFETY INSTRUCTIONS



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 OUALIFIED SERVICE PERSONNEL.

· Explanation of Graphical Symbols

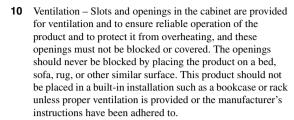


The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

- 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.
- 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 overturn.



- 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.
- 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 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.
- 15 Power Lines An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- 16 Overloading Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- 17 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.
- 18 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.
- 19 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,
 - If liquid has been spilled, or objects have fallen into the product,
 - c) If the product has been exposed to rain or water,

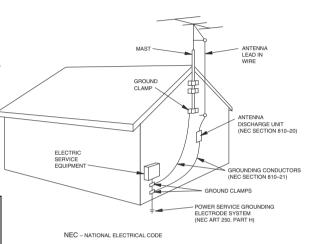
- d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore 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.
- 20 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.
- 21 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.
- 22 Wall or Ceiling Mounting The unit should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 23 Heat The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Note to CATV system installer:

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

24 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.

EXAMPLE OF ANTENNA GROUNDING



FCC INFORMATION (for US customers)

1 IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

- 2 IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
- 3 NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices

This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to coaxial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Electronics Corp., U.S.A. 6660 Orangethorpe Ave, Buena Park, CA 90620

The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

CAUTION: READ THIS BEFORE OPERATING YOUR UNIT.

- 1 To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference
- 2 Install this sound system in a well ventilated, cool, dry, clean place — away from direct sunlight, heat sources, vibration, dust, moisture, and/or cold. Allow ventilation space of at least 30 cm on the top, 20 cm on the left and right, and 20 cm on the back of this unit.
- 3 Locate this unit away from other electrical appliances, motors, or transformers to avoid humming sounds.
- 4 Do not expose this unit to sudden temperature changes from cold to hot, and do not locate this unit in a environment with high humidity (i.e. a room with a humidifier) to prevent condensation inside this unit, which may cause an electrical shock, fire, damage to this unit, and/or personal injury.
- 5 Avoid installing this unit where foreign object may fall onto this unit and/or this unit may be exposed to liquid dripping or splashing. On the top of this unit, do not place:
 - Other components, as they may cause damage and/or discoloration on the surface of this unit.
 - Burning objects (i.e. candles), as they may cause fire, damage to this unit, and/or personal injury.
 - Containers with liquid in them, as they may fall and liquid may cause electrical shock to the user and/or damage to this unit.
- 6 Do not cover this unit with a newspaper, tablecloth, curtain, etc. in order not to obstruct heat radiation. If the temperature inside this unit rises, it may cause fire, damage to this unit, and/or personal injury.
- 7 Do not plug in this unit to a wall outlet until all connections are complete.
- 8 Do not operate this unit upside-down. It may overheat, possibly causing damage.
- 9 Do not use force on switches, knobs and/or cords.
- 10 When disconnecting the power cord from the wall outlet, grasp the plug; do not pull the cord.
- 11 Do not clean this unit with chemical solvents; this might damage the finish. Use a clean, dry cloth.
- 12 Only voltage specified on this unit must be used.
 Using this unit with a higher voltage than specified is dangerous and may cause fire, damage to this unit, and/or personal injury. YAMAHA will not be held responsible for any damage resulting from use of this unit with a voltage other than specified.

- 13 To prevent damage by lightning, disconnect the power cord from the wall outlet during an electrical storm.
- 14 Do not attempt to modify or fix this unit. Contact qualified YAMAHA service personnel when any service is needed. The cabinet should never be opened for any reasons.
- 15 When not planning to use this unit for long periods of time (i.e. vacation), disconnect the AC power plug from the wall outlet.
- 16 Be sure to read the "TROUBLESHOOTING" section on common operating errors before concluding that this unit is faulty.
- 17 Before moving this unit, press STANDBY/ON to set this unit in the standby mode, and disconnect the AC power plug from the wall outlet.

WARNING

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

This unit is not disconnected from the AC power source as long as it is connected to the wall outlet, even if this unit itself is turned off. This state is called the standby mode. In this state, this unit is designed to consume a very small quantity of power.

FOR CANADIAN CUSTOMERS

To prevent electric shock, match wide blade of plug to wide slot and fully insert.

This Class B digital apparatus complies with Canadian ICES-003.

IMPORTANT

Please record the serial number of this unit in the space below.

MODEL:

Serial No.:

The serial number is located on the rear of the unit. Retain this Owner's Manual in a safe place for future reference.

We Want You Listening For A Lifetime

YAMAHA and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion - and, most importantly, without affecting your sensitive hearing.

Since hearing damage from loud sounds is often undetectable until it is too late, YAMAHA and the Electronic Industries Association's Consumer Electronics Group recommend you to avoid prolonged exposure from excessive volume levels.



CONTENTS

INTRODUCTION	
FEATURES	2
GETTING STARTED	3
Supplied accessories	3
Installing batteries in the remote control	3
CONTROLS AND FUNCTIONS	4
Front panel	4
Remote control	6
Using the remote control	7
Front panel display	8
Rear panel	9

PREPARATION	
SPEAKER SETUP	10
Speaker placement	
Speaker connections	11
CONNECTIONS	
Before connecting components	13
Connecting video components	14
Connecting audio components	17
Connecting the antennas	18
Connecting the power supply cord	
Turning on the power	21
BASIC SETUP	22
Using the BASIC SETUP menu	22

BASIC OPERATION			
PLAYBACK	25		
Basic operations	25		
Selecting sound field programs	27		
Selecting input modes	31		
TUNING	33		
Automatic and manual tuning	33		
Presetting stations			
Selecting preset stations	36		
Exchanging preset stations	37		
RECORDING	38		

$\overline{}$	$\overline{}$				_	_	
ı		INI		1 D 1			AMS
-	T				-1-1	-	

SOUND FIELD PROGRAM	
DESCRIPTIONS	39
For movie/video sources	39
For music sources	41

ADVANCED OPERATION

ADVANCED OPERATIONS	42
Using the sleep timer	42
Manually adjusting speaker levels	
Using the test tone	43
SET MENU	44
Using SET MENU	45
1 SOUND MENU	
2 INPUT MENU	
3 OPTION MENU	49
REMOTE CONTROL FEATURES	
Control area	51
Setting manufacturer codes	52
Controlling other components	
Clearing setup manufacturer codes	

ADDITIONAL INFORMATION

ADDITIONAL IN CHINATION	
EDITING SOUND FIELD PARAMETERS.	55
What is a sound field	55
Changing parameter settings	55
SOUND FIELD PARAMETER	
DESCRIPTIONS	57
TROUBLESHOOTING	59
RESETTING THE FACTORY PRESETS	63
GLOSSARY	64
Audio formats	64
Sound field programs	65
Audio information	
Video signal information	66
SPECIFICATIONS	

FEATURES

Built-in 6-channel power amplifier

Minimum RMS output power

[HTR-5750]

 $(0.06\% \text{ THD}, 20 \text{ Hz} - 20 \text{ kHz}, 8\Omega)$

Front: 90 W + 90 W Center: 90 W

Surround: 90 W + 90 W Surround back: 90 W

[HTR-5740]

 $(0.06\% \text{ THD}, 20 \text{ Hz} - 20 \text{ kHz}, 8\Omega)$

Front: 85 W + 85 W Center: 85 W

Surround: 85 W + 85 W Surround back: 85 W

Sound field features

- Proprietary YAMAHA technology for the creation of sound fields
- ◆ Dolby Digital/Dolby Digital EX decoder
- ◆ DTS/DTS ES Matrix 6.1, Discrete 6.1, DTS Neo:6, DTS 96/24 decoder
- Dolby Pro Logic/Dolby Pro Logic II/Dolby Pro Logic IIx decoder
- ◆ Virtual CINEMA DSP
- ◆ SILENT CINEMA™

Sophisticated AM/FM tuner

- ◆ 40-station random access preset tuning
- ◆ Automatic preset tuning
- ◆ Preset station shifting capability (preset editing)

Other features

- ◆ 192-kHz/24-bit D/A converter
- A SET MENU which provides you with items for optimizing this unit for your audio/video system
- ◆ 6 additional input jacks for discrete multi-channel input
- Component video input/output capability
- ◆ Optical and coaxial digital audio signal jacks
- ◆ Sleep timer
- ◆ Cinema and music night listening modes
- ◆ Remote control with preset manufacturer codes

[HTR-5750 only]

- ◆ S-Video signal input/output capability
- ◆ Video signal conversion (Composite video ↔ S-Video) capability for monitor out

- This document is the owner's manual for both HTR-5750 and HTR-5740. Model names are given where the details of functions are unique to each model. Illustrations for HTR-5750 are mainly used for explanations.
- 🕍 indicates a tip for your operation.
- Some operations can be performed by using either the buttons on the main unit or on the remote control. In cases when the button names differ between the main unit and the remote control, the button name on the remote control is given in parentheses.
- This manual is printed prior to production. Design and specifications are subject to change in part as a result of improvements, etc. In case of differences between the manual and product, the product has priority.



Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", "Surround EX", and the double-D symbol are trademarks of Dolby Laboratories.



"DTS", "DTS-ES", "Neo:6" and "DTS 96/24" are trademarks of Digital Theater Systems, Inc.

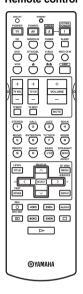
"SILENT CINEMA" is a trademark of YAMAHA CORPORATION.

GETTING STARTED

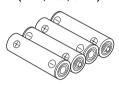
Supplied accessories

Please check that you received all of the following parts.

Remote control



Batteries (4) (AAA, R03, UM-4)



AM loop antenna



75-ohm/300-ohm antenna adapter (U.K. model only)



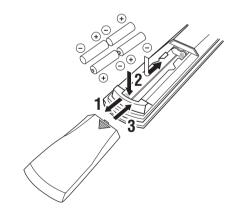
Indoor FM antenna (U.S.A., Canada and China models)



Indoor FM antenna (U.K., Europe, Australia and Korea models)



Installing batteries in the remote control



- 1 Press the

 part and slide the battery compartment cover off.
- Insert four supplied batteries (AAA, R03, UM-4) according to the polarity markings (+ and -) on the inside of the battery compartment.
- 3 Slide the cover back until it snaps into place.

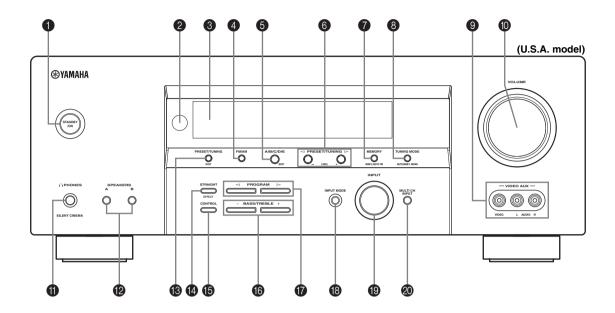
Notes on batteries

- Change all of the batteries if you notice the condition like; the operation range of the remote control decreases, the indicator does not flash or its light becomes dim.
- Do not use old batteries together with new ones.
- Do not use different types of batteries (such as alkaline and manganese batteries) together. Read the packaging carefully as these different types of batteries may have the same shape and color.
- If the batteries have leaked, dispose of them immediately. Avoid touching the leaked material or letting it come into contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.

If the remote control is without batteries for more than 2 minutes, or if exhausted batteries remain in the remote control, the contents of the memory may be cleared. When the memory is cleared, insert new batteries, set up the manufacturer code and program any acquired functions that may have been cleared.

CONTROLS AND FUNCTIONS

Front panel



STANDBY/ON

Turns on this unit or sets it to the standby mode. When you turn on this unit, you will hear a click and there will be a 4 to 5-second delay before this unit can reproduce sound.

Note

In standby mode, this unit consumes a small amount of power in order to receive infrared-signals from the remote control.

Remote control sensor

Receives signals from the remote control.

Front panel display

Shows information about the operational status of this unit.

FM/AM

Switches the reception band between FM and AM.

6 A/B/C/D/E (NEXT)

Selects one of the 5 preset station groups (A to E) when the unit is in tuner mode.

Selects the speaker channel to be adjusted when the unit is not in tuner mode.

6 PRESET/TUNING <1/> / > (LEVEL -/+)

Selects preset station number 1 to 8 when the colon (:) is displayed next to the band indication in the front panel display when the unit is in tuner mode. Selects the tuning frequency when the colon (:) is not displayed. Adjusts the level of the speaker channel selected using A/B/C/D/E (NEXT) when the unit is not in tuner mode.

⋒ MEMORY (MAN'L/AUTO FM)

Stores a station in the memory. Hold down this button for more than 3 seconds to start automatic preset tuning.

3 TUNING MODE (AUTO/MAN'L MONO)

Switches between automatic tuning (AUTO indicator on) and manual tuning (AUTO indicator off).

VIDEO AUX jacks

Input audio and video signals from a portable external source such as a game console. To reproduce source signals from these jacks, select V-AUX as the input source.

VOLUME

Controls the output level of all audio channels. This does not affect the REC OUT level.

=nglist

Outputs audio signals for private listening with headphones. When you connect headphones, no signals are output to the OUTPUT jacks or to the speakers. All Dolby Digital and DTS audio signals are mixed down to the left and right headphone channels.

SPEAKERS A/B

Turns on or off the set of front speakers connected to the A and/or B terminals on the rear panel each time the corresponding button is pressed.

(B) PRESET/TUNING (EDIT)

Switches the function of PRESET/TUNING <1/▷ (LEVEL -/+) between selecting preset station numbers and tuning.

STRAIGHT (EFFECT)

Switches the sound fields off or on. When STRAIGHT is selected, input signals (2-channel or multi-channel) are output directly from their respective speakers without effect processing.

(B) CONTROL

Use to adjust the bass/treble balance for the front left and right speakers (see page 26).

BASS/TREBLE -/+

Use to adjust the bass/treble balance for the front left and right speakers (in conjunction with CONTROL).

® PROGRAM < 1 / ▷

Use to select sound field programs (see page 26).

INPUT MODE

Sets the priority (AUTO, DTS, ANALOG) for the type of signals received when one component is connected to two or more of this unit's input jacks (see page 31).

INPUT selector

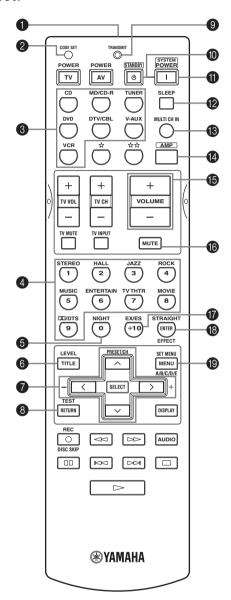
Selects the input source you want to listen to or watch.

MULTI CH INPUT

Selects the source connected to the MULTI CH INPUT jacks. When selected, the MULTI CH INPUT source takes priority over the source selected with INPUT (or the input selector buttons on the remote control).

Remote control

This section describes the function of each control on the remote control used to control this unit. To operate other components, see "REMOTE CONTROL FEATURES" on page 51.



Infrared window

Outputs infrared control signals. Aim this window at the component you want to operate.

CODE SET

Use to set up manufacturer codes (see page 52).

Input selector buttons

Select the input source and change the control area.

4 Sound field program / numeric buttons (1 - 8)

Use to select sound field programs.

Use numbers 1 through 8 to select preset stations when the unit is in tuner mode.

NIGHT

Turns on or off the night listening modes (see page 30).

6 LEVEL

Selects the speaker channel to be adjusted and sets the level.

• Cursor buttons $\wedge / \vee / \langle / \rangle /$ SELECT

Use to select and adjust sound field program parameters or SET MENU items.

Press \wedge / \vee to select preset station numbers when the unit is in tuner mode.

TEST (RETURN)

Outputs the test tone to adjust the speaker levels. Returns to the previous menu level when adjusting the SET MENU parameters.

TRANSMIT indicator

Flashes while the remote control is sending signals.

STANDBY

Sets this unit in the standby mode.

SYSTEM POWER

Turns on the power of this unit.

SLEEP

Sets the sleep timer.

® MULTI CH IN

Selects MULTI CH INPUT when using an external decoder (etc.).

AMP

Selects the AMP mode. You must select the AMP mode to control the main unit.

6 VOLUME -/+

Increases or decreases the volume level.

1 MUTE

Mutes the sound. Press again to restore the audio output to the previous volume level.

(7) EX/ES

Switches between 5.1 or 6.1-channel playback of multichannel software.

English

® STRAIGHT (EFFECT)

Switches the sound fields off or on. When STRAIGHT is selected, input signals (2-channel or multi-channel) are output directly from their respective speakers without effect processing.

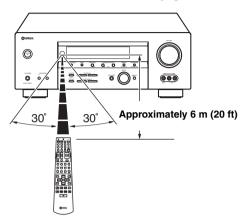
(9) SET MENU (A/B/C/D/E)

Activates the SET MENU function.

Selects preset station groups when the unit is in tuner mode.

Using the remote control

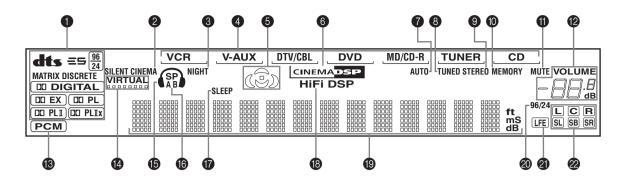
The remote control transmits a directional infrared beam. Be sure to aim the remote control directly at the remote control sensor on the main unit during operation.



■ Handling the remote control

- Do not spill water or other liquids on the remote control
- Do not drop the remote control.
- Do not leave or store the remote control in the following types of conditions:
 - high humidity such as near a bath
 - high temperature such as near a heater or stove
 - extremely low temperatures
 - dusty places

Front panel display



Decoder indicators

When any of this unit's decoders function, the respective indicator lights up.

2 SILENT CINEMA indicator

Lights up when headphones are connected and a sound field program is selected (see page 26).

NIGHT indicator

Lights up when you select night listening mode.

Input source indicators

A cursor lights to show the current input source.

6 Sound field indicators

Light to indicate the active DSP sound fields.

Presence DSP sound field



Surround back DSP sound field

6 CINEMA DSP indicator

Lights up when you select a CINEMA DSP sound field program.

AUTO indicator

Lights up to indicate that automatic tuning is possible.

3 TUNED indicator

Lights up when this unit is tuned into a station.

STEREO indicator

Lights up when this unit is receiving a strong signal for an FM stereo broadcast while the AUTO indicator is lit.

MEMORY indicator

Blinks to show that a station can be stored.

MUTE indicator

Blinks while the MUTE function is on.

VOLUME level indication

Indicates the volume level.

PCM indicator

Lights up when this unit is reproducing PCM (pulse code modulation) digital audio signals.

VIRTUAL indicator

Lights up when Virtual CINEMA DSP is active (see page 31).

Headphones indicator

Lights up when headphones are connected.

SP A B indicators

Light up according to the set of front speakers selected. Both indicators light up when both sets of speakers are selected.

SLEEP indicator

Lights up while the sleep timer is on.

(B) HiFi DSP

Lights when you select a HiFi DSP sound field program.

Multi-information display

Shows the current sound field program name and other information when adjusting or changing settings.

@ 96/24 indicator

Lights up when a DTS 96/24 signal is input to this unit.

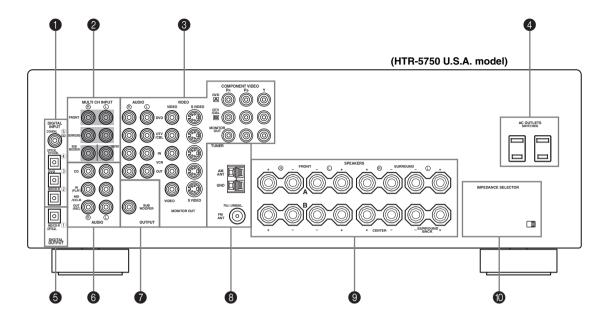
LFE indicator

Lights up when the input signal contains the LFE signal.

Input channel indicators/speaker indicators

Indicate the channel components of the current digital input signal.

Indicate the number of speakers connected in SPEAKERS (page 23), or indicate the channel being adjusted in SP LEVEL (page 47).



DIGITAL INPUT jacks

[HTR-5750]

CD(§), DTV/CBL(4), DVD(3), MD/CD-R(2) [HTR-5740]

CD③, DTV/CBL②, DVD①
See pages 14, 16 and 17 for details.

2 MULTI CH INPUT jacks

See page 15 for connection information.

Video component jacks

See pages 14 and 16 for connection information. S VIDEO jacks are only available for HTR-5750.

AC OUTLET(S)

Use to supply power to your other A/V components (see page 19).

DIGITAL OUTPUT jack (HTR-5750 only)

See page 17 for details.

6 Audio component jacks

See page 17 for connection information.

SUB WOOFER OUTPUT jack

See page 12 for connection information.

Antenna terminals

See page 18 for connection information.

Speaker terminals

See page 12 for connection information.

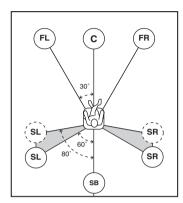
(1) IMPEDANCE SELECTOR switch

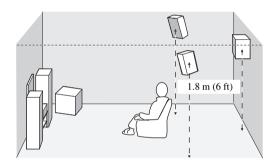
See page 20.

SPEAKER SETUP

Speaker placement

The speaker layout below shows the standard ITU-R speaker setting. You can use it to enjoy CINEMA DSP and multi-channel audio sources.





Front speakers (FR and FL)

The front speakers are used for the main source sound plus effect sounds. Place these speakers an equal distance from the ideal listening position. The distance of each speaker from each side of the video monitor should be the same.

Center speaker (C)

The center speaker is for the center channel sounds (dialog, vocals, etc.). If for some reason it is not practical to use a center speaker, you can do without it. Best results, however, are obtained with the full system. Align the front face of the center speaker with the front face of your video monitor. Place the speaker centrally between the front speakers and as close to the monitor as possible, such as directly over or under it.

Surround speakers (SR and SL)

The surround speakers are used for effect and surround sounds. Place these speakers behind your listening position, facing slightly inwards, about 1.8 m (6 ft) above the floor.

Surround back speaker (SB)

The surround back speaker supplements the surround speakers and provides for more realistic front-to-back transitions. Place this speaker directly behind the listening position and at the same height as the surround speakers.

Subwoofer

The use of a subwoofer, such as the YAMAHA Active Servo Processing Subwoofer System, is effective not only for reinforcing bass frequencies from any or all channels, but also for high fidelity reproduction of the LFE (low-frequency effect) channel included in Dolby Digital and DTS software. The position of the subwoofer is not so critical, because low bass sounds are not highly directional. But it is better to place the subwoofer near the front speakers. Turn it slightly toward the center of the room to reduce wall reflections.

English

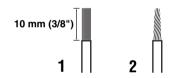
Speaker connections

Be sure to connect the left channel (L), right channel (R), "+" (red) and "-" (black) properly. If the connections are faulty, no sound will be heard from the speakers, and if the polarity of the speaker connections is incorrect, the sound will be unnatural and lack bass.

CAUTION

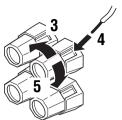
- If you will use 6 ohm speakers, be sure to set this unit's speaker impedance setting to 6 ohms before using (see page 20).
- Before connecting the speakers, make sure that the power of this unit is off.
- Do not let the bare speaker wires touch each other or do not let them touch any metal part of this unit. This could damage this unit and/or speakers.
- Use magnetically shielded speakers. If this type of speakers still creates the interference with the monitor, place the speakers away from the monitor.

A speaker cord is actually a pair of insulated cables running side by side. One cable is colored or shaped differently, perhaps with a stripe, groove or ridges. Connect the striped (grooved, etc.) cable to the "+" (red) terminals on this unit and your speaker. Connect the plain cable to the "-" (black) terminals.



- 1 Remove approximately 10 mm (3/8") of insulation from the end of each speaker cable.
- 2 Twist the exposed wires of the cable together to prevent short circuits.
- 3 Unscrew the knob.
- 4 Insert one bare wire into the hole in the side of each terminal.

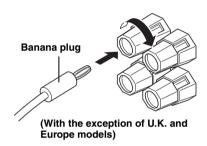
5 Tighten the knob to secure the wire.

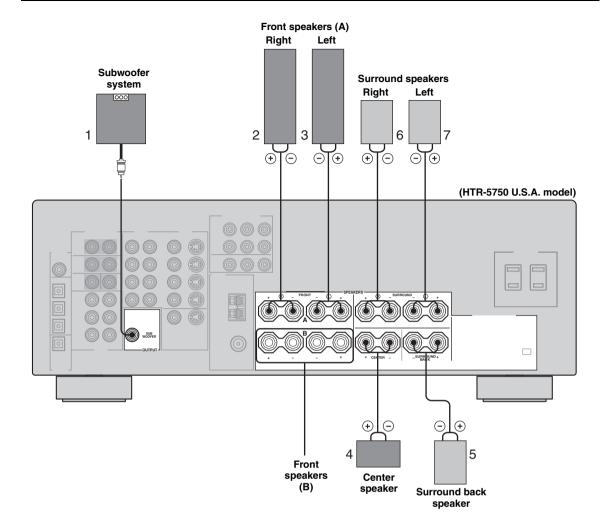


Red: positive (+) Black: negative (-)

■ Banana plug connections

(With the exception of U.K. and Europe models) First, tighten the knob and then insert the banana plug connector into the end of the corresponding terminal.





■ FRONT terminals

Connect one or two speaker systems to these terminals. If you use only one speaker system, connect it to either the FRONT A or B terminals.

Note

The Canada model cannot output to two separate speaker systems simultaneously.

■ CENTER terminals

Connect a center speaker to these terminals.

■ SURROUND terminals

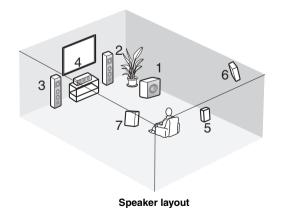
Connect surround speakers to these terminals.

■ SUB WOOFER jack

Connect a subwoofer with built-in amplifier, such as the YAMAHA Active Servo Processing Subwoofer System, to this jack.

SURROUND BACK terminals

Connect a surround back speaker to these terminals.



CONNECTIONS

Before connecting components

CAUTION

Do not connect this unit or other components to the mains power until all connections between components are complete.

Cable indications

For analog signals left analog cables right analog cables ■ R D For digital signals optical cables coaxial cables For video signals video cables S-Video cables s D

Analog jacks

You can input analog signals from audio components by connecting audio pin cable to the analog jacks on this unit. Connect red plugs to the right jacks and white plugs to the left jacks.

■ Digital jacks

This unit has digital jacks for direct transmission of digital signals through either coaxial or fiber optic cables. You can use the digital jacks to input PCM, Dolby Digital and DTS bitstreams. When you connect components to both the COAXIAL and OPTICAL jacks, priority is given to the input signals from the COAXIAL jack. All digital input jacks are compatible with 96-kHz sampling digital signals.

Note

This unit handles digital and analog signals independently. Thus audio signals input to the analog jacks are only output to the analog OUT (REC) jacks.

[HTR-5750 only] Likewise audio signals input to the digital (OPTICAL or COAXIAL) jacks are only output to the DIGITAL OUTPUT jack.

Dust protection cap

Pull out the cap from the optical jack before you connect the fiber optic cable. Do not discard the cap. When you are not using the optical jack, be sure to put the cap back in place. This cap protects the jack from dust.



Video jacks

[HTR-5750 1

This unit has three types of video jacks. Connection depends on the availability of input jacks on your monitor. The signals input through the S VIDEO jacks on this unit are automatically converted for output through the VIDEO jacks. When V CONV. is set to ON (see page 49), signals input through the VIDEO jacks can be output through the S VIDEO jacks.









[HTR-5740]

This unit has two types of video jacks. Connection depends on the availability of input jacks on your monitor.







VIDEO jack

For conventional composite video signals.

S VIDEO jack (HTR-5750 only)

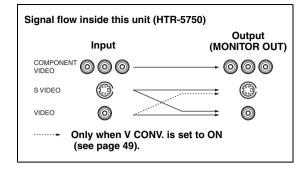
For S-Video signals, separated into luminance (Y) and color (C) video signals to achieve high-quality color reproduction.

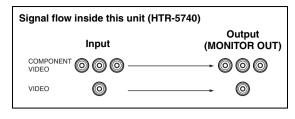
COMPONENT VIDEO jacks

For component signals, separated into luminance (Y) and color difference (PB, PR) to provide the best quality in picture reproduction.

Note

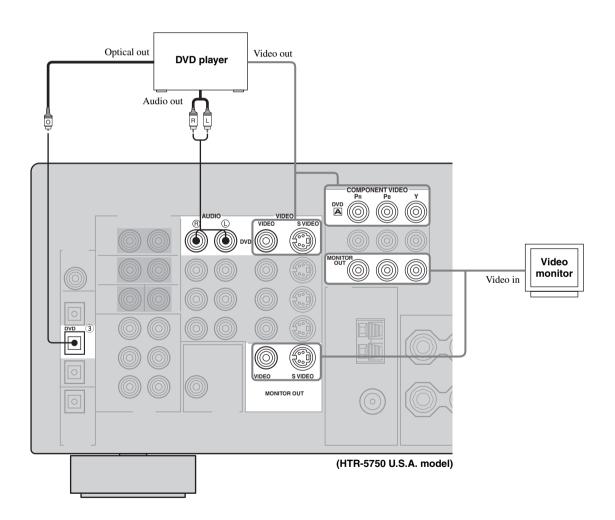
[HTR-5750 only] When signals are input through both the S VIDEO and VIDEO jacks, signals input through the S VIDEO jack have priority.





Connecting video components

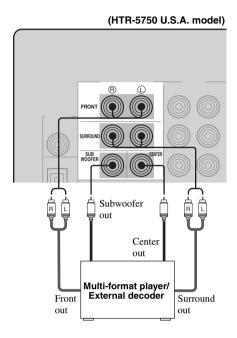
■ Connections for DVD playback



■ Connecting to the MULTI CH INPUT jacks

This unit is equipped with 6 additional input jacks (left and right FRONT, CENTER, left and right SURROUND and SUB WOOFER) for discrete multi-channel input from a multi-format player, external decoder, sound processor or pre-amplifier.

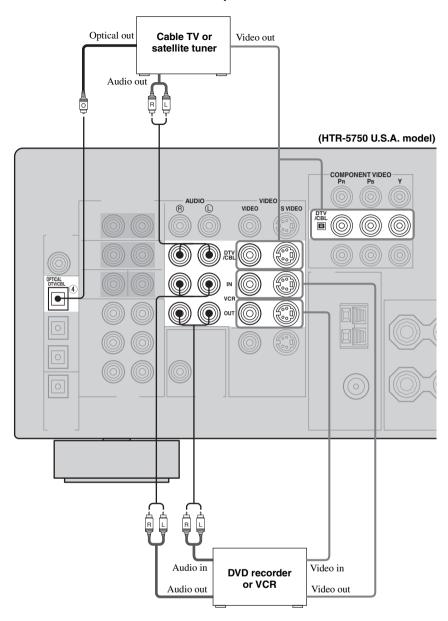
Connect the output jacks on your multi-format player or external decoder to the MULTI CH INPUT jacks. Be sure to match the left and right outputs to the left and right input jacks for the front and surround channels.



Notes

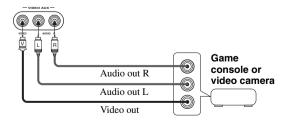
- When you select MULTI CH INPUT as the input source, this unit automatically turns off the digital sound field processor, and you cannot select sound field programs.
- This unit does not redirect signals input to the MULTI CH INPUT jacks to accommodate for missing speakers. We recommend that you connect at least a 5.1-channel speaker system before using this feature.
- When headphones are used, only front left and right channels are output.

■ Connections for other video components



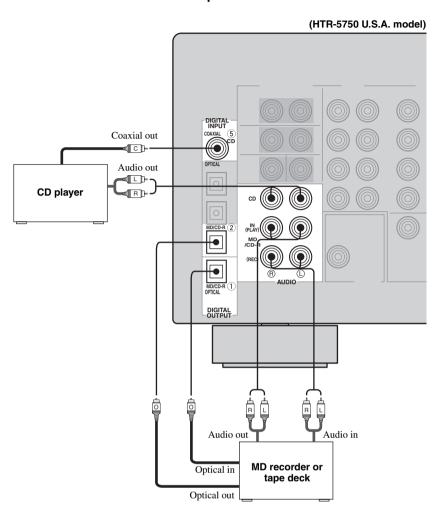
■ VIDEO AUX jacks (on the front panel)

Use these jacks to connect any video source, such as a game console or video camera, to this unit.



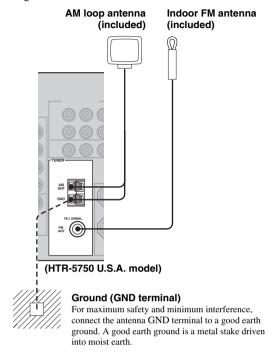
Connecting audio components

■ Connections for audio components



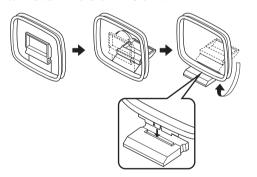
Connecting the antennas

Both AM and FM indoor antennas are included with this unit. In general, these antennas should provide sufficient signal strength. Connect each antenna correctly to the designated terminals.



■ Connecting the AM loop antenna

1 Set up the AM loop antenna, then connect it to the terminals on this unit.



Press and hold the tab to insert the AM loop antenna lead wires into the AM ANT and GND terminals.



3 Orient the AM loop antenna for the best reception.



Notes

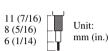
- The AM loop antenna should be placed away from this unit.
- The AM loop antenna should always be connected, even if an outdoor AM antenna is connected to this unit.
- A properly installed outdoor antenna provides clearer reception than an indoor one. If you experience poor reception quality, an outdoor antenna may improve the quality. Consult the nearest authorized YAMAHA dealer or service center about outdoor antennas.

75-ohm/300-ohm antenna adapter (U.K. model only)

Open the cover of the included 75-ohm/300-ohm antenna adapter.



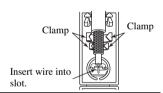
2 Cut the external sleeve of the 75-ohm coaxial cable and prepare it for connection.



3 Cut the lead wire and remove it.



4 Insert the cable wire into the slot, and clamp it with pliers.



5 Snap the cover into place.



nglish

Connecting the power supply cord

■ Connecting the AC power cord

Plug the power cord into an AC wall outlet.

■ AC OUTLET(S) (SWITCHED)

U.K. and Australia models	1 OUTLET
Korea model	None
Other models	OUTLETS

Use these outlets to connect the power cords from your other components to this unit. Power to the AC OUTLET(S) is controlled by this unit's STANDBY/ON (or SYSTEM POWER and STANDBY). The outlet(s) supply power to any connected component whenever this unit is turned on. The maximum power (total power consumption of components) that can be connected to the AC OUTLET(S) is:

■ Memory back-up

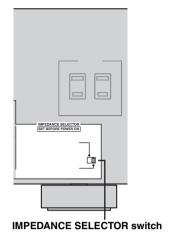
The memory back-up circuit prevents the stored data from being lost even if this unit is in the standby mode. However if the power cord is disconnected from the AC wall outlet, or the power supply is cut for more than one week, the stored data will be lost.

■ IMPEDANCE SELECTOR switch

CAUTION

Do not change the setting of the IMPEDANCE SELECTOR switch when the unit power is switched on, as doing so may damage the unit.

If this unit fails to turn on when STANDBY/ON is pressed on either the front panel or remote control, the IMPEDANCE SELECTOR switch may not be fully slid to either position. If this is the case, slide the switch all the way to either position when this unit is in standby mode. Select the switch position (left or right) according to the impedance of the speakers in your system.



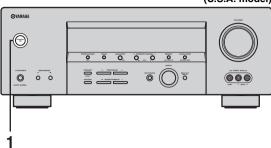
Switch position	Speaker	Impedance level
	Front	If you use one set (A or B), the impedance of each speaker must be $4\ \Omega$ or higher.
Left	Front	If you use two sets (A and B), the impedance of each speaker must be 8 Ω or higher.
	Center, Surround, Surround back	The impedance of each speaker must be 6 Ω or higher.
	Front	If you use one set (A or B), the impedance of each speaker must be 8 Ω or higher.
Right	FIOR	If you use two sets (A and B), the impedance of each speaker must be 16Ω or higher.*
Center, Surround, Surround back		The impedance of each speaker must be 8 Ω or higher.

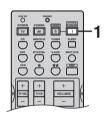
^{*} The Canada model cannot use two separate speaker systems (A and B) simultaneously when the switch is set to the right position.

Turning on the power

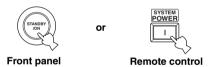
When all connections are complete, turn on the power of this unit.

(U.S.A. model)





1 Press STANDBY/ON (SYSTEM POWER on the remote control) to turn on the power of this unit.



2 Turn on the video monitor connected to this unit.

BASIC SETUP

The basic setup feature is a useful way to set up your system quickly and with minimal effort.

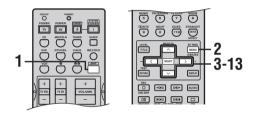
`\o':

- If you wish to configure the unit manually using more precise adjustments, use the detailed parameters in SOUND MENU (page 46) instead of using BASIC SETUP.
- Altering any parameters in BASIC SETUP will reset all parameters in SOUND MENU.

Using the BASIC SETUP menu

Before you begin:

- Press SPEAKERS A or B on the front panel to select the main speakers you want to use.
- Make sure you disconnect your headphones from this unit.

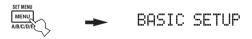


1 Press AMP.

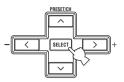


2 Press SET MENU.

"BASIC SETUP" appears in the front panel display.



3 Press SELECT to enter BASIC SETUP.



The ROOM parameter appears in the front panel display.

4 Press </> /> to select the desired setting.

ROOM: S M >L

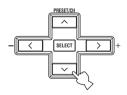
Select the size of the room you have installed your speakers in. Roughly speaking, the room sizes are defined as follows:

[U.S.A. and Canada models]

5 (small) 16 x 13ft, 200ft² (4.8 x 4.0m, 20m²) M (medium) 20 x 16ft, 300ft² (6.3 x 5.0m, 30m²) L (large) 26 x 19ft, 450ft² (7.9 x 5.8m, 45m²)

[Other models]

5 (small) 3.6 x 2.8m, 10m² M (medium) 4.8 x 4.0m, 20m² L (large) 6.3 x 5.0m, 30m²

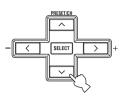


6 Press </> </> /> to select the desired setting.

SUBWOOFER YES

YES If you have a subwoofer in your system.

NONE If you do not have a subwoofer in your system.

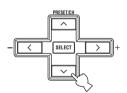


8 Press </> /> to select the number of speakers you connected.

SPEAKERS 6spk

Choices	Display	Speakers
2spk	L	Front L/R
3spk	LCR	Front L/R, Center
4spk	L R SL SR	Front L/R, Surround L/R
5spk	LCR SL SR	Front L/R, Center, Surround L/R
6spk	L C R SL SB SR	Front L/R, Center, Surround L/R, Surround back

9 Press v to display SET/CANCEL.



$\overline{10}$ Press </br>

>SET CANCEL

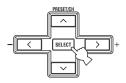
SET To apply the settings you chose in steps

4 through 8.

CANCEL To cancel the setup without making any

changes.

11 Press SELECT to confirm your selection.



If you selected SET, you hear a test tone from each speaker in turn. "CHECK:Test Tone" appears in the front panel display for a few seconds, then "CHECK: OK?".

CHECK:TestTone **↓**CHECK OK? YES

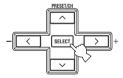
12 Press </>/> to select the desired setting.

CHECK OK? YES

YES To complete the setup process if the test tone levels from each speaker were satisfactory.

To proceed to the SP LEVEL speaker level adjustment menu to balance the level of each speaker.

13 Press SELECT to confirm your selection.



If you selected NO in step 12, the front speaker level adjustment display appears in the front panel display.

■ To balance the speaker levels

Perform the following steps after step 13 (see page 23).



The unit outputs the test tone from the selected speaker and the left front (or left surround) speaker in turn. The indicator of the speaker currently outputting the test tone flashes in the front panel display.

1 Press ✓ / ∧ to select a speaker, then use </> to adjust the balance.

FR-----II-----

Adjusts the balance between the front left and right speakers.

Ć-----II-----

Adjusts the balance between the front left and center speakers.

ŚL----

Adjusts the balance between the front left and surround left speakers.

5B----II----

Adjusts the balance between the surround left and surround back speakers.

SR-----

Adjusts the balance between the surround left and surround right speakers.

SWFR-----II-----

Adjusts the balance between the front left speaker and the subwoofer.

Press SET MENU to exit after balancing the speakers.

`\oʻ:

You can also balance the speaker levels using test tone by pressing TEST on the remote control.

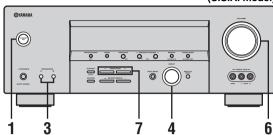
Memory back-up

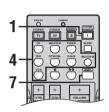
The memory back-up circuit prevents the stored data from being lost even if this unit is in the standby mode. However, if the power cord is disconnected from the AC outlet, or the power supply is cut for more than one week, the stored data will be lost. If so, adjust the items again.

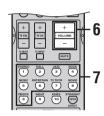
PLAYBACK

Basic operations

(U.S.A. model)







1 Press STANDBY/ON (SYSTEM POWER on the remote control) to turn on the power.



or



Front panel

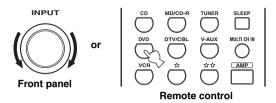
Remote control

- 2 Turn on the video monitor connected to this unit.
- **3** Press SPEAKERS A or B on the front panel. Each press turns the respective speakers on or off.

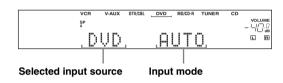


4 Select the input source.

Use INPUT (or press one of the input selector buttons on the remote control) to select the input you desire.



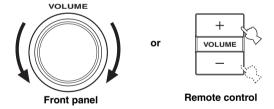
The current input source name and input mode appear in the front panel display and video monitor for a few seconds.



5 Start playback or select a broadcast station on the source component.

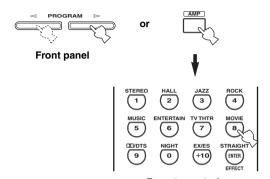
Refer to the operating instructions for the component.

6 Adjust the volume to the desired output level.



7 Select a sound field program if desired.

Press PROGRAM
/ > repeatedly (or press AMP on the remote control to select the AMP mode, then press one of the sound field program buttons repeatedly) to select a sound field program. (See page 39 for details about sound field programs.)



Remote control

To listen with headphones (SILENT CINEMA)

"SILENT CINEMA" allows you to enjoy multi-channel music or movie sound, including Dolby Digital and DTS surround, through ordinary headphones. "SILENT CINEMA" activates automatically whenever you connect headphones to the PHONES jack while listening to CINEMA DSP or HiFi DSP sound field programs. When activated, the "SILENT CINEMA" indicator lights up in the front panel display.

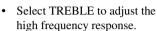
Notes

- This unit will not be set to "SILENT CINEMA" when MULTI CH INPUT is selected as the input source.
- "SILENT CINEMA" is not effective when the Direct Stereo or 2ch Stereo program is selected, or in STRAIGHT mode.

To adjust the tone

You can adjust the tonal quality of your front left and right speakers or headphones (when connected).

Press CONTROL on the front panel repeatedly to select TREBLE or BASS, then press BASS/TREBLE –/+ repeatedly to increase or decrease.



 Select BASS to adjust the low frequency response.

To cancel the tone control, press CONTROL repeatedly to select BYPASS.

`\o':

Speaker and headphone adjustments are stored independently.

Notes

- If you increase or decrease the high-frequency or low-frequency sound to an extreme level, the tonal quality of the surround speakers may not match that of the front left and right speakers.
- CONTROL is not effective with the Direct Stereo program (page 30) or MULTI CH INPUT.

To mute the sound

Press MUTE on the remote control. The MUTE indicator blinks in the front panel display.

To resume the audio output, press
MUTE again (or press VOLUME –/+).

The MUTE indicator disappears from



BASS/TREBLE

`\<u>\</u>'

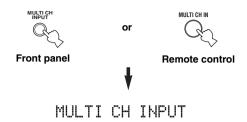
the display.

You can adjust the muting level (see page 48).

=nglisr

■ Selecting MULTI CH INPUT

Press MULTI CH INPUT so that "MULTI CH INPUT" appears in the front panel display and video monitor.



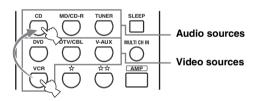
Note

When "MULTI CH INPUT" is shown in the front panel display, no other source can be played. To select another input source with INPUT (or one of the input selector buttons), press MULTI CH INPUT to turn off "MULTI CH INPUT" in the front panel display.

Playing video sources in the background

You can combine a video image from a video source with sound from an audio source. For example, you can enjoy listening to classical music while viewing beautiful scenery from the video source on the video monitor.

Use the input selector buttons on the remote control to select a video source, then select an audio source.

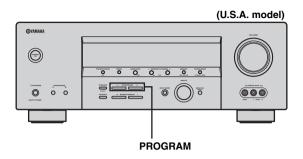


Note

If you want to enjoy audio from the MULTI CH INPUT jacks together with a video source, first select the video source, then press MULTI CH INPUT.

Selecting sound field programs

■ Front panel operation

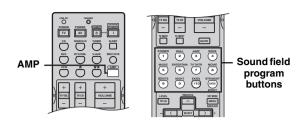


Press PROGRAM \lhd / \triangleright repeatedly to select the desired program.

The name of the selected program appears in the front panel display and video monitor.

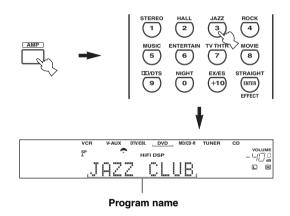


■ Remote control operation



Press AMP to select the AMP mode, then press one of the sound field program buttons repeatedly to select the desired program.

The name of the selected program appears in the front panel display.



`\\\

Feel free to choose a sound field program based on your listening preference, and not purely on the name of the program itself.

Notes

- When you select an input source, this unit automatically selects the last sound field program used with that source.
- Sound field programs cannot be selected when MULTI CH INPUT is selected.
- Sampling frequencies higher than 48 kHz (except for DTS 96/ 24 signals) will be sampled down to 48 kHz, then sound field programs will be applied.

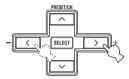
■ Enjoying multi-channel software

If you connected a surround back speaker, use this feature to enjoy 6.1-channel playback for multi-channel sources using the Dolby Pro Logic IIx, Dolby Digital Surround EX or DTS-ES decoders.

Press AMP on the remote control to select the AMP mode, then press EX/ES to switch between 5.1 and 6.1-channel playback.



To select a decoder, press </>
/> repeatedly while PLIIxMusic (etc.) is displayed.



AUTO (AUTO)

When a signal (flag) that can be recognized by the unit is input, the unit selects the optimum decoder for playing back the signal in 6.1 channels.

If the unit cannot recognize the flag or no flag is present in the input signal, it cannot automatically be played in 6.1 channels.

Decoders (select with </>)

You can select from the following decoders depending on the format of the software you are playing.

PLIIxMusic

For playing back Dolby Digital or DTS signals in 6.1 channels using the Pro Logic IIx music decoder. EX/ES

For playing back Dolby Digital signals in 6.1 channels using the Dolby Digital Surround EX decoder. DTS signals are played back in 6.1 channels using the DTS-ES decoder.

EΧ

For playing back Dolby Digital or DTS signals in 6.1 channels using the Dolby Digital Surround EX decoder.

OFF (OFF)

Decoders are not used to create 6.1 channels.

Notes

- Some 6.1-channel compatible discs do not have a signal (flag) which this unit can automatically detect. When playing these kinds of discs with 6.1-channel, select a decoder manually (PLIIx Music, EX/ES or EX).
- 6.1-channel playback is not possible even if EX/ES is pressed in the following cases:
- When "SURR LR" (see page 46) or "SURR B" (see page 46) is set to NONE.
- When the source connected to the MULTI CH INPUT jack is being played.
- When the source being played does not contain surround left and right channel signals.
- When a Dolby Digital KARAOKE source is being played.
- When "2ch Stereo" or "Direct Stereo" is selected.
- When the power of this unit is turned off, the input mode will be reset to AUTO.
- When the DTS-ES decoder is applied to DTS 96/24 signals, you cannot use the DTS 96/24 decoding feature.
- The Pro Logic IIx decoder is not available when "SURR B" is set to NONE (see page 46).

■ Enjoying 2-channel software

Signals input from 2-channel sources can also be played back on multiple channels.

Press □□/DTS on the remote control to select the decoder.



You can select from the following decoders depending on the type of software you are playing and your personal preference.

PRO LOGIC SUR. STANDARD

Standard processing for Dolby Surround sources.

PRO LOGIC SUR. ENHANCED

CINEMA DSP enhanced processing for Dolby Surround sources.

PRO LOGIC IIx Movie*

Dolby Pro Logic II/IIx processing for movie software.

PRO LOGIC IIx Music*

Dolby Pro Logic II/IIx processing for music software.

PRO LOGIC IIx Game*

Dolby Pro Logic II/IIx processing for game software.

DTS Neo:6 Cinema

DTS processing for movie software.

DTS Neo:6 Music

DTS processing for music software.

* Use the PLII/PLIIx parameter to select the Pro Logic II or Pro Logic IIx decoders (see page 40).

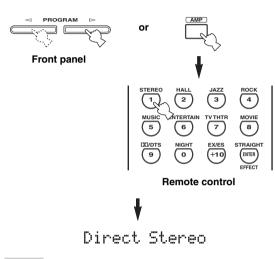
Note

The Pro Logic IIx decoder is not available when "SURR B" is set to NONE (see page 46).

■ Listening to high fidelity stereo sound (Direct Stereo)

Direct Stereo allows you to bypass this unit's decoders and DSP processors to enjoy pure high fidelity sound from 2-channel PCM and analog sources.

Press PROGRAM
√ > repeatedly (or press AMP to select the AMP mode, then press STEREO repeatedly) to select "Direct Stereo".



Notes

- To avoid unexpected noise, do not play DTS-encoded CDs in this mode.
- When multi-channel signals (Dolby Digital and DTS) are input, this unit automatically switches to the corresponding analog input. (When DTS is selected as an input mode, no sound will be heard.)
- No sound will be output from the subwoofer.
- CONTROL (page 26) and SET MENU (page 44) settings are not effective.
- The front panel display automatically dims.

Night listening modes

The night listening modes are designed to improve listenability at lower volumes or at night. Choose either NIGHT:CINEMA or NIGHT:MUSIC depending on the type of material you are playing.

Press NIGHT on the remote control repeatedly to select cinema or music.

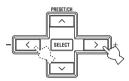
When night listening is selected, the NIGHT indicator in the front panel display lights up.



- Select NIGHT:CINEMA when watching films to reduce the dynamic range of film soundtracks and make dialog easier to hear at lower volumes.
- Select NIGHT:MUSIC when listening to music sources to preserve ease-of-listening for all sounds.
- Select OFF if you do not want to use this function.

Press </> /> to adjust the effect level while NIGHT:CINEMA or NIGHT:MUSIC is displayed.

This adjusts the level of compression.



Remote control

Effect.Lvl:MID

- · Select MIN for minimum compression.
- · Select MID for standard compression.
- Select MAX for maximum compression.

`\\.

NIGHT:CINEMA and NIGHT:MUSIC adjustments are stored independently.

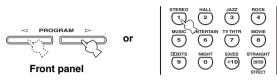
Notes

- You cannot use the night listening modes with the Direct Stereo program or MULTI CH INPUT (even though the NIGHT indicator lights up when Direct Stereo is selected).
- The night listening modes may vary in effectiveness depending on the input source and surround sound settings you use.

Downmixing to 2 channels

You can enjoy 2-channel stereo playback even from multichannel sources.

Press PROGRAM
√ > repeatedly (or press STEREO on the remote control) to select 2ch Stereo.



Remote control



2ch Stereo

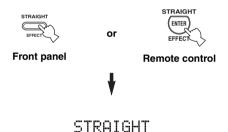
`\o'_

You can use a subwoofer with this program when SWFR or BOTH is selected in "BASS OUT".

■ Listening to unprocessed input signals

In STRAIGHT mode, two channel stereo sources are output from only the front left and right speakers. Multichannel sources are decoded straight into the appropriate channels without any additional effect processing.

Press STRAIGHT (EFFECT) to select STRAIGHT.



Press STRAIGHT (EFFECT) again so that "STRAIGHT" disappears from the display when you want to turn the sound effect back on.

■ Virtual CINEMA DSP

Virtual CINEMA DSP allows you to enjoy the CINEMA DSP programs without surround speakers. It creates virtual speakers to reproduce the natural sound field. If you do not connect surround speakers, Virtual CINEMA DSP activates automatically whenever you select a CINEMA DSP sound field program.

Note

Virtual CINEMA DSP will not activate, even when "SURR LR" is set to NONE (see page 46) in the following cases:

- When MULTI CH INPUT is selected as the input source.
- When headphones are connected to the PHONES jack.

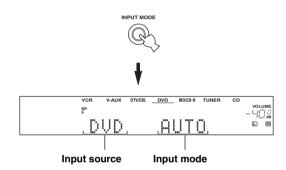
Selecting input modes

This unit comes with a variety of input jacks. Do the following to select the type of input signals you want to

1 Rotate INPUT to select the input source.



Press INPUT MODE to select an input mode. In most cases, use AUTO.



AUTO Automatically selects input signals in

the following order:

1) Digital signals*

2) Analog signals
DT5 Selects only digital signals encoded in

DTS. If no DTS signals are input, no

sound is output.

ANALOG Selects only analog signals. If no

analog signals are input, no sound is

output.

* If this unit detects a Dolby Digital or DTS signal, the decoder automatically switches to the appropriate sound field program.

`\\\

You can adjust the default input mode this unit selects when the power is turned on (see page 49).

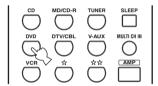
Notes

- When you play DTS-encoded CD/LDs with the input mode set to AUTO:
 - This unit automatically switches to the DTS decoding mode. The unit remains in DTS mode (and the dts indicator may flash) for up to 30 seconds after playback of the DTS source is complete. To manually release the DTS mode, press INPUT MODE to reselect AUTO.
- The DTS decoding mode may be released if search or skip operations are performed for more than 30 seconds. To prevent this, press INPUT MODE to select DTS.
- If the digital output data of the player has been processed in any way, you may not be able to perform DTS decoding even if you make a digital connection between this unit and the player.

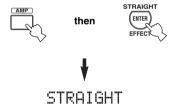
Displaying the information about the input source

You can display the type, format and sampling frequency of the current input signal.

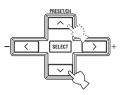
1 Select the input source.



Press AMP to select the AMP mode, then press STRAIGHT (EFFECT) so that "STRAIGHT" appears in the display.



Press \wedge / \vee to display the following information about the input signal.



Signal format display. When the unit (Format) cannot detect a digital signal it automatically switches to analog input. in Number of source channels in the input signal. For example, a multi-channel soundtrack with 3 front channels, 2 surround channels and LFE, is displayed as "3/2/LFE". fs Sampling frequency. When the unit is unable to detect the sampling frequency "Unknown" appears. rate Bit rate. When the unit is unable to

Flag data encoded with DTS or Dolby Digital signals that cue this unit to automatically switch decoders.

flg

detect the bit rate "Unknown" appears.

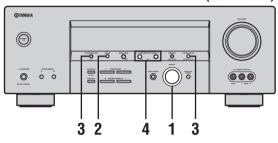
TUNING

Automatic and manual tuning

There are 2 tuning methods; automatic and manual. Automatic tuning is effective when station signals are strong and there is no interference.

■ Automatic tuning

(U.S.A. model)



1 Rotate INPUT to select TUNER as the input source.



2 Press FM/AM to select the reception band.

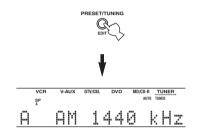
"FM" or "AM" appears in the front panel display.



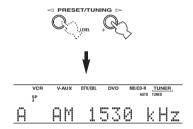
3 Press TUNING MODE (AUTO/MAN'L MONO) so that the AUTO indicator lights up in the front panel display.



If a colon (:) appears in the front panel display, tuning is not possible. Press PRESET/TUNING (EDIT) to turn the colon (:) off.



4 Press PRESET/TUNING <1/
→ once to begin automatic tuning.



When tuned into a station, the TUNED indicator lights up and the frequency of the received station is shown in the front panel display.

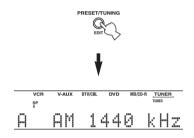
Manual tuning

If the signal from the station you want to select is weak, tune into it manually. Manually tuning into an FM station will automatically switch the tuner to monaural reception to increase the signal quality.

- Select TUNER and the reception band following steps 1 and 2 as described in "Automatic tuning".
- Press TUNING MODE (AUTO/MAN'L MONO) so that the AUTO indicator disappears from the front panel display.



If a colon (:) appears in the front panel display, tuning is not possible. Press PRESET/TUNING (EDIT) to turn the colon (:) off.



3 Press PRESET/TUNING <1/ > to tune into the desired station manually.

Hold down the button to continue searching.

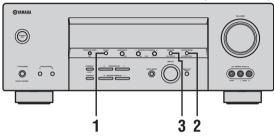


Presetting stations

■ Automatically presetting FM stations

You can use the automatic preset tuning feature to store FM stations. This function enables this unit to automatically tune into FM stations with strong signals, and to store up to 40 (8 stations in 5 groups, A1 through E8) of those stations in order. You can then recall any preset station easily by selecting the preset station number.

(U.S.A. model)



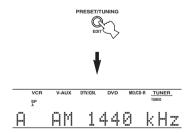
1 Press FM/AM to select the FM band.



2 Press TUNING MODE (AUTO/MAN'L MONO) so that the AUTO indicator lights up in the front panel display.



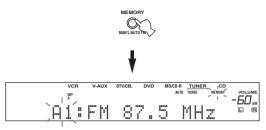
If a colon (:) appears in the front panel display, tuning is not possible. Press PRESET/TUNING (EDIT) to turn the colon (:) off.



Engli

3 Press and hold MEMORY (MAN'L/AUTO FM) for more than 3 seconds.

The preset number, the MEMORY and AUTO indicators flash. After about 5 seconds, automatic presetting starts from the frequency currently displayed and proceeds toward the higher frequencies.



When automatic preset tuning is completed, the front panel display shows the frequency of the last preset station.

Notes

- Any stored station data existing under a preset number is cleared when you store a new station under that preset number.
- If the number of the received stations does not reach 40 (E8), automatic preset tuning has automatically stopped after searching all stations.
- Only FM stations with sufficient signal strength are stored automatically by automatic preset tuning. If the station you want to store is weak in signal strength, tune into it manually and store it by following the procedure in "Manually presetting stations".

Automatic preset tuning options

You can select the preset number from which this unit will store FM stations and/or begin tuning toward lower frequencies.

After pressing MEMORY in step 3:

- 1 Press A/B/C/D/E, then PRESET/TUNING
 √ > to select the preset number under which the first station will be stored. Automatic preset tuning will stop when stations have all been stored up to E8.
- 2 Press PRESET/TUNING (EDIT) to turn off the colon
 (:) and then press PRESET/TUNING

 □ to begin tuning toward the lower frequencies.

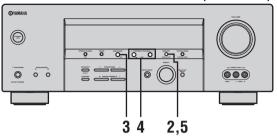
Memory back-up

The memory back-up circuit prevents the stored data from being lost even if this unit is set in the standby mode, the power cord is disconnected from the AC outlet, or the power supply is temporarily cut due to power failure. However, if the power is cut for more than one week, the preset stations may be cleared. If so, store the stations again by using the presetting station methods.

Manually presetting stations

You can also store up to 40 stations (8 stations x 5 groups) manually.

(U.S.A. model)



1 Tune into a station.

See page 33 for tuning instructions.



When tuned into a station, the front panel display shows the frequency of the station received.

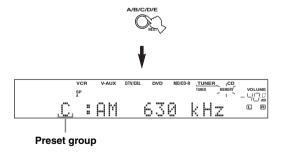
2 Press MEMORY (MAN'L/AUTO FM).

The MEMORY indicator flashes for about 5 seconds.



3 Press A/B/C/D/E repeatedly to select a preset station group (A to E) while the MEMORY indicator is flashing.

The group letter appears. Check that the colon (:) appears in the front panel display.



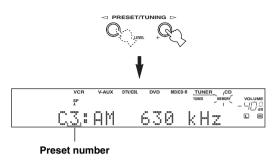
4 Press PRESET/TUNING √ > to select a preset station number (1 through 8) while the MEMORY indicator is flashing.

Press

to select a higher preset station number.

Press

to select a lower preset station number.



5 Press MEMORY (MAN'L/AUTO FM) on the front panel while the MEMORY indicator is flashing.

The station band and frequency appear in the front panel display with the preset group and number you have selected.





Shows the displayed station has been stored as C3.

6 Repeat steps 1 to 5 to store other stations.

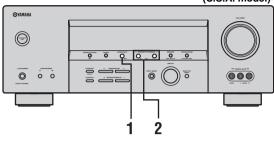
Notes

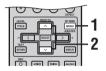
- Any stored station data existing under a preset number is cleared when you store a new station under that preset number.
- The reception mode (stereo or monaural) is stored along with the station frequency.

Selecting preset stations

You can tune any desired station simply by selecting the preset station number under which it was stored.

(U.S.A. model)

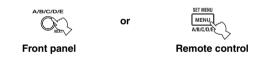




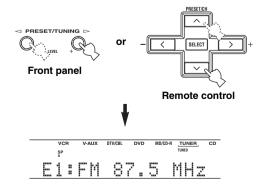
When performing this operation with the remote control, first press TUNER to set the remote to tuner mode.

1 Press A/B/C/D/E to select the preset station group.

The preset group letter appears in the front panel display and changes each time you press the button.



The preset group and number appear in the front panel display along with the station band, frequency and the TUNED indicator lights up.

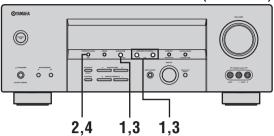


englist

Exchanging preset stations

You can exchange the assignment of two preset stations with each other. The example below describes the procedure for exchanging preset station "E1" with "A5".

(U.S.A. model)

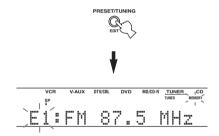


1 Select preset station "E1" using A/B/C/D/E and PRESET/TUNING <1/>
/▷.

See "Selecting preset stations".

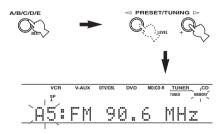
2 Press and hold PRESET/TUNING (EDIT) for more than 3 seconds.

"E1" and the MEMORY indicator flash in the front panel display.



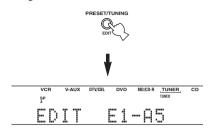
3 Select preset station "A5" using A/B/C/D/E and PRESET/TUNING <1/> /▷.

"A5" and the MEMORY indicator flash in the front panel display.



4 Press PRESET/TUNING (EDIT) again.

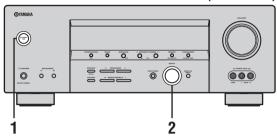
The stations stored at the two preset assignments are exchanged.

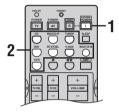


RECORDING

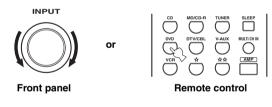
Recording adjustments and other operations are performed from the recording components. Refer to the operating instructions for those components.

(U.S.A. model)





- 1 Turn on the power of this unit and all connected components.
- 2 Select the source component you want to record from.



- 3 Start playback (or select a broadcast station) on the source component.
- 4 Start recording on the recording component.

``⊚′≏

Do a test recording before you start an actual recording.

Notes

- When this unit is set in the standby mode, you cannot record between other components connected to this unit.
- The setting of CONTROL, VOLUME, "SP LEVEL" (page 47) and the sound field programs does not affect recorded material.
- A source connected to the MULTI CH INPUT jacks of this unit cannot be recorded.
- [HTR-5750 only] S-Video and composite video signals pass independently through this unit's video circuits. Therefore, when recording or dubbing video signals, if your video source component is connected to provide only an S-Video (or only a composite video) signal, you can record only an S-Video (or only a composite video) signal to your VCR.
- [HTR-5750] Digital signals input to the DIGITAL INPUT jacks are not output to the analog AUDIO OUT (L/R) jacks for recording. Likewise, analog signals input to the AUDIO IN (L/R) jacks are not output to the DIGITAL OUTPUT jack. Therefore, if your source component is connnected to provide only digital (or analog) signals, you can only record digital (or analog) signals.
- [HTR-5740] Digital signals input to the DIGITAL INPUT jacks are not output to the analog AUDIO OUT (L/R) jacks for recording. You can only record analog signals.
- A given input source is not output on the same REC OUT channel. (For example, the signal input from VCR IN is not output on VCR OUT.)
- Check the copyright laws in your country to record from records, CDs, radio, etc. Recording of copyrighted material may infringe copyright laws.

If you playback a video source that uses scrambled or encoded signals to prevent it from being dubbed, the picture itself may be disturbed due to those signals.

Special considerations when recording DTS software

The DTS signal is a digital bitstream. Attempting to digitally record the DTS bitstream will result in noise being recorded. Therefore, if you want to use this unit to record sources that have DTS signals recorded on them, the following considerations and adjustments need to be made.

For DVDs and CDs encoded with DTS, when your player is compatible with the DTS format, follow its operating instructions to make a setting so that the analog signal will be output from the player.

SOUND FIELD PROGRAM DESCRIPTIONS

This unit is equipped with a variety of precise digital decoders that allow you to enjoy multichannel playback from almost any sound source (stereo or multichannel). This unit is also equipped with a YAMAHA digital sound field processing (DSP) chip containing several sound field programs which you can use to enhance your playback experience. Most of these sound field programs are precise digital recreations of actual acoustic environments found in famous concert halls, music venues, and movie theaters.

`\o':

The YAMAHA CINEMA DSP modes are compatible with all Dolby Digital, DTS, and Dolby Surround sources. Set the input mode to AUTO (see page 31) to enable this unit to automatically switch to the appropriate digital decoder according to the input signal.

Notes

- This unit's DSP sound field programs are recreations of real-world acoustic environments made from precise measurements taken in the actual hall, etc. Thus you may notice variations in the strength of the reflections coming from the front, back, left and right.
- Feel free to choose a sound field program based on your listening preference, and not purely on the name of the program itself.

For movie/video sources

You can select from the following sound fields when playing movie or video sources. The sound fields marked "MULTI" can be used with multi-channel sources, like DVD, digital TV, etc. Those marked "2-CH" can be used with 2-channel (stereo) sources like TV programs, video tapes, etc.

Program Features		Sources
STEREO: 2ch Stereo	Downmixes multi-channel sources to 2 channels (left and right) or plays back 2-channel sources as is.	
MUSIC VIDEO	This program lends an enthusiastic atmosphere to the sound, giving you the feeling you are at an actual jazz or rock concert.	
ENTERTAINMENT: Game	This program adds a deep and spatial feeling to video game sounds.	
TV THEATER: Mono Movie	This program is provided for reproducing monaural video sources (such as old movies). The program produces the optimum reverberation to create sound depth using only the presence sound field.	
TV THEATER: Variety/Sports	Though the presence sound field is relatively narrow, the surround sound field employs the sound environment of a large concert hall. This effect enhances the experience of watching various TV programs such as news, variety shows, music programs or sports programs.	
MOVIE THEATER: Spectacle	CINEMA DSP processing. This program creates the extremely wide sound field of a 70-mm movie theater. It precisely reproduces the source sound in detail, making both the video and the sound field incredibly real. This is ideal for any kind of video source encoded with Dolby Surround, Dolby Digital or DTS (especially large-scale movie productions).	MULTI 2-CH
MOVIE THEATER: Sci-Fi	CINEMA DSP processing. This program clearly reproduces dialog and sound effects in the latest sound form for science fiction films, thus creating a broad and expansive cinematic space amid silence. You can enjoy science fiction films in a virtual-space sound field that includes Dolby Surround, Dolby Digital and DTS-encoded software employing the most advanced techniques.	
MOVIE THEATER: Adventure	CINEMA DSP processing. This program is ideal for precisely reproducing the sound design of the newest 70-mm and multichannel soundtrack films. The sound field is made to be similar to that of the newest movie theaters, so the reverberations of the sound field itself are restrained as much as possible.	
MOVIE THEATER: General	CINEMA DSP processing. This program is for reproducing sounds from 70-mm and multichannel soundtrack films, and is characterized by soft and extensive sound field.	

SOUND FIELD PROGRAM DESCRIPTIONS

Program	Features	Sources
DOLBY DIGITAL: SUR. STANDARD	Standard 5.1-channel processing for Dolby Digital sources.	
DOLBY DIGITAL: SUR. ENHANCED	CINEMA DSP enhanced processing for Dolby Digital sources.	
DOLBY D EX: SUR. STANDARD	Standard 6.1-channel processing for Dolby Digital sources.	
DOLBY D EX: SUR. ENHANCED	CINEMA DSP enhanced 6.1-channel processing (Dolby Digital EX) for Dolby Digital sources.	
DTS: SUR. STANDARD	Standard 5.1-channel processing for DTS sources.	
DTS 96/24: SUR. STANDARD	Standard 5.1-channel processing for 96-kHz/24-bit DTS sources.	
DTS: SUR. ENHANCED	CINEMA DSP enhanced processing for DTS and 96-kHz/24-bit DTS sources.	MULTI
DTS+DOLBY EX: SUR. STANDARD	Standard 6.1-channel processing (Dolby Digital EX) for DTS sources.	
DTS+DOLBY EX: SUR. ENHANCED	CINEMA DSP enhanced 6.1-channel processing (Dolby Digital EX) for DTS sources.	
DTS ES Mtrx6.1: SUR. STANDARD	Standard 6.1-channel processing (DTS-ES Matrix) for DTS sources.	
DTS ES Mtrx6.1: SUR. ENHANCED	CINEMA DSP enhanced processing (DTS-ES Matrix) for DTS sources.	
DTS ES Disc6.1: SUR. STANDARD	Standard 6.1-channel processing (DTS-ES Discrete) for DTS sources.	
DTS ES Disc6.1: SUR. ENHANCED	CINEMA DSP enhanced processing (DTS-ES Discrete) for DTS sources.	
PRO LOGIC: SUR. STANDARD	Standard processing for Dolby Surround sources.	
PRO LOGIC: SUR. ENHANCED	CINEMA DSP enhanced processing for Dolby Surround sources.	
PRO LOGIC IIx: PLIIx Movie	Dolby Pro Logic IIx processing for movie software.*	
PRO LOGIC II: PLII Movie	Dolby Pro Logic II processing for movie software.*	2-CH
PRO LOGIC IIx: PLIIx Game	Dolby Pro Logic IIx processing for game software.*	
PRO LOGIC II: PLII Game	Dolby Pro Logic II processing for game software.*	
DTS:Neo:6 Cinema	DTS processing for movie software.	

^{*} You can select either Pro Logic IIx or Pro Logic II processing using the PLII/PLIIx parameter on page 58.

For music sources

You can select from the following sound fields when playing music sources, like CD, FM/AM broadcasting, tapes, etc.

Program	Features	Sources
CONCERT HALL	HiFi DSP processing. A classic shoe-box type concert hall with approximately 1700 seats. Pillars and ornate carvings create extremely complex reflections which produce a very full, rich sound.	
JAZZ CLUB	HiFi DSP processing. This is the sound field at stage front in "The Bottom Line", a famous New York jazz club. The floor can seat 300 people to the left and right in a sound field offering a real and vibrant sound.	MULTI
ROCK CONCERT	HiFi DSP processing. The ideal program for lively, dynamic rock music. The data for this program was recorded at LA's "hottest" rock club. The listener's virtual seat is at the center-left of the hall.	2-CH
ENTERTAINMENT: Disco	HiFi DSP processing. This program recreates the acoustic environment of a lively disco in the heart of a big city. The sound is dense and highly concentrated. It is also characterized by highenergy, "immediate" sound.	
DO D+PLIIx Music: SUR. STANDARD	Standard Dolby Digital and Dolby Pro Logic IIx processing for music sources.	
DO D+PLIIx Music: SUR. ENHANCED	CINEMA DSP enhanced Dolby Digital and Dolby Pro Logic IIx processing for music sources.	MULTI
DTS+PLIIx Music: SUR. STANDARD	Standard DTS and Dolby Pro Logic IIx processing for music sources.	MULII
DTS+PLIIx Music: SUR. ENHANCED	CINEMA DSP enhanced DTS and Dolby Pro Logic IIx processing for music sources.	
STEREO: 2ch Stereo	2-channel (left and right) playback.	
STEREO: Direct Stereo	Use to output stereo sources to only the front left and right speakers without any processing.	
STEREO: 6ch Stereo	Use to increase the output stereo sources (in stereo) from all speakers. This provides a larger sound field and is ideal for background music at parties, etc.	2-CH
PRO LOGIC IIx: PLIIx Music	Dolby Pro Logic IIx processing for music software.*	
PRO LOGIC II: PLII Music	Dolby Pro Logic II processing for music software.*	
DTS:Neo:6 Music	DTS processing for music software.	

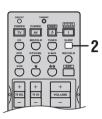
^{*} You can select either Pro Logic IIx or Pro Logic II processing using the PLII/PLIIx parameter on page 58.

ADVANCED OPERATIONS

Using the sleep timer

Use this feature to automatically set this unit in the standby mode after a certain amount of time. The sleep timer is useful when you are going to sleep while this unit is playing or recording a source. The sleep timer also automatically turns off any external components connected to the AC OUTLET(S).

■ Setting the sleep timer

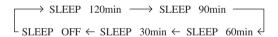


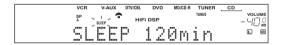
Select a source and start playback on the source component.

2 Press SLEEP repeatedly to set the amount of time.



Each time you press SLEEP, the front panel display changes as shown below. The SLEEP indicator flashes while switching the amount of time for the sleep timer.





The SLEEP indicator lights up in the front panel display, and the display returns to the selected sound field program.

SLEEP indicator



■ Canceling the sleep timer

Press SLEEP repeatedly until "SLEEP OFF" appears in the front panel display.

After a few seconds, "SLEEP OFF" disappears, and the SLEEP indicator goes off.



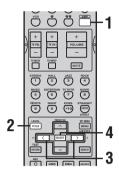
`\\\

The sleep timer setting can also be canceled by pressing STANDBY on the remote control (or STANDBY/ON on the front panel) to set this unit to the standby mode.

nglish

Manually adjusting speaker levels

You can adjust the output level of each speaker while listening to a music source. This is also possible when playing sources through the MULTI CH INPUT jacks. Please note that this operation will override the level adjustments made in "BASIC SETUP" (page 22), "SP LEVEL" (page 47) and "Using the test tone" (page 43).



1 Press AMP.

2 Press LEVEL repeatedly to select the speaker you want to adjust.

FRONT L Front left speaker level
CENTER Center speaker level
FRONT R Front right speaker level
SUR.R Surround right speaker level
SUR.B Surround back speaker level
SUR.L Surround left speaker level
SUFR Subwoofer level

٧,٧

Once you press LEVEL, you can also select the speaker by pressing \wedge / \vee .

- **3** Press </br>
 The control range is from +10 dB to -10 dB.
- 4 Press SELECT when you have completed your adjustment.

\\\\

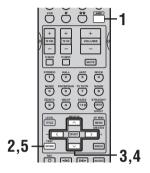
This operation can also be performed using the controls on the front panel. Press NEXT repeatedly to select the speaker you want to adjust, then press LEVEL -/+ to adjust the output level.

Using the test tone

You can use the test tone feature to manually balance your speaker levels. Please note that this operation will override the level adjustments made in "BASIC SETUP" (page 22), "SP LEVEL" (page 47) and "Manually adjusting speaker levels" (page 43). Use the test tone to set speaker levels so that the volume from each speaker is identical when heard from your listening position.

Note

You cannot activate the test tone if headphones are connected to the PHONES jack. Remove the headphones from the PHONES jack.



- 1 Press AMP.
- 2 Press TEST.

The unit outputs a test tone.

3 Press ∧ / ∨ repeatedly to select the speaker you want to adjust.

	, ,	
TEST	LEFT	Front left speaker
TEST	CENTER	Center speaker
TEST	RIGHT	Front right speaker
TEST	SUR.R	Right surround speaker
TEST	SUR.B	Surround back speaker
TEST	SUR.L	Left surround speaker
TEST	SUBWOOFER	Subwoofer

- 4 Press </br>
 /> to adjust speaker volumes.
- 5 Press TEST when you have completed your adjustment.

The test tone stops.

SET MENU

You can use the following parameters in SET MENU to adjust a variety of system settings and customize the way this unit operates. Change the initial settings (indicated in bold under each parameter) to reflect the needs of your listening environment.

BASIC SETUP

Use to quickly setup basic system parameters (see page 22).

MANUAL SETUP

Use to adjust speaker and system settings.

1 SOUND MENU

Use to manually adjust any speaker setting, alter the quality and tone of the sound output by the system or compensate for video signal processing delays when using LCD monitors or projectors.

`\\\

Most of the parameters described in SOUND MENU are set automatically when you perform "BASIC SETUP" (see page 22). You can use SOUND MENU to make further adjustments.

Item	Features	Page
A)SPEAKER SET	Selects the size of each speaker, the speakers for low-frequency signal output, and the cross over frequency.	46
B)SP LEVEL	Adjusts the output level of each speaker.	47
C)SP DISTANCE	Adjusts the delay time of each speaker.	47
D)CENTER GEQ	Adjusts the tonal quality of the center speaker.	47
E)LFE LEVEL	Adjusts the output level of the LFE channel for Dolby Digital or DTS signals.	47
F)D. RANGE	Adjusts the dynamic range for Dolby Digital or DTS signals.	47
G)AUDIO SET	Customizes the muting level and audio delay.	48

2 INPUT MENU

Use to reassign digital input/outputs and select the input mode.

Item	Features	
A)I/O ASSIGN	Assigns jacks according to the component to be used.	48
B)INPUT MODE	Selects the initial input mode of the source.	49

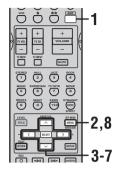
3 OPTION MENU

Use to adjust the optional system parameters.

Item	Features	Page
A)DISPLAY SET	Adjusts the brightness of the display and converts video signals.	49
B)MEMORY GUARD	Locks sound field program parameters and other SET MENU settings.	49
C)PARAM. INI	Initializes the parameters of a group of sound field programs.	50
D)ZONE SET	Specifies the location of the speakers connected to the SPEAKERS B terminals.	50

Using SET MENU

Use the remote control to access and adjust each parameter.



`\o'_

You can change SET MENU parameters while the unit is reproducing sound.

Note

You cannot change some SET MENU parameters while the unit is in either cinema or music night listening mode.

- 1 Press AMP.
- 2 Press SET MENU.

"BASIC SETUP" appears in the front panel display.

MANUAL SETUP

4 Press SELECT to enter MANUAL SETUP.

1 SOUND MENU appears in the front panel display.

- 1 SOUND MENU
- 5 Press \wedge / \vee to display the desired menu.
 - 1 SOUND MENU
 - 2 INPUT MENU
 - 3 OPTION MENU

6 Press SELECT to enter the displayed menu.

Repeat steps 5 and 6 to navigate to and enter the items you want to adjust.

To return to the previous menu level, press RETURN.

Press \(/ \simeq \) to select the item you want to adjust, then press \(/ \simeq \) to change the setting of the item.

Repeat this operation to select and adjust each setting. To return to the previous menu level, press RETURN.

8 To exit, press SET MENU when finished.

Memory back-up

The memory back-up circuit prevents the stored data from being lost even if this unit is in the standby mode. However, if the power cord is disconnected from the AC outlet, or the power supply is cut for more than one week, the stored data will be lost. If so, adjust the items again.

1 SOUND MENU

Use to manually adjust any speaker setting or compensate for video signal processing delays when using LCD monitors or projectors. Most of the SOUND MENU parameters are set automatically when you perform "BASIC SETUP" (see page 22).

■ Speaker set A)SPEAKER SET

Use to manually adjust any speaker setting.

`\\\

If you are not satisfied with the bass sounds from your speakers, you can change these settings according to your preference.

Center speaker CENTER

Choices: LRG, SML, NONE

- Select LRG if you have a large center speaker. The unit directs the entire range of the center channel signal to the center speaker.
- Select SML if you have a small center speaker. The unit directs the low-frequency signals of the center channel to the speakers selected with "BASS OUT".
- Select NONE if you do not have a center speaker. The unit directs all of the center channel signal to the front left and right speakers.

Front speakers FRONT

Choices: LARGE, SMALL

- Select LARGE if you have large front speakers. The unit directs the entire range of the front left and right channel signals to the front left and right speakers.
- Select SMALL if you have small front speakers. The unit directs the low-frequency signals of the front channel to the speakers selected with "BASS OUT".

Surround left/right speakers SURR LR

Choices: LRG, SML, NONE

- Select LRG if you have large surround left and right speakers. The entire range of the surround channel signal is directed to the surround left and right speakers.
- Select SML if you have small surround left and right speakers. The low-frequency signals of the surround channel are directed to the speakers selected with "BASS OUT".
- Select NONE if you do not have surround speakers.
 This will set the unit to the Virtual CINEMA DSP mode (see page 31) and automatically set the surround back speaker setting (SURR B) to NONE.

Surround back speaker SURR B

Choices: LRG, SML, NONE

- Select LRG if you have a large surround back speaker.
- Select SML if you have a small surround back speaker.
 The low-frequency signals of the surround back
 channel are directed to the speakers selected with
 "BASS OUT", and the rest of the frequency signals are
 directed to the surround back speaker.
- Select NONE if you do not have a surround back speaker. The unit directs all of the surround back channel signal to the surround left and right speakers.

Bass out BASS OUT

Low-frequency (bass) signals can be directed to the subwoofer and/or the front left and right speakers according to the characteristics of your system. This setting also determines the routing of the LFE (low-frequency effect) signals found in Dolby Digital or DTS sources.

Choices: SWFR (subwoofer), FRONT, BOTH

- Select SWFR if you connect a subwoofer. LFE and low-frequency signals from other channels are directed to the subwoofer according to the speaker settings.
- Select FRONT if you do not use a subwoofer. LFE and low-frequency signals from other channels are directed to the front speakers according to the speaker settings (even if you have previously set the front speakers to SMALL).
- Select BOTH if you connect a subwoofer and you want to output low-frequency signals from front channels to both the front speakers and subwoofer. LFE and lowfrequency signals from other channels are also directed to the subwoofer according to the speaker settings. Use this function to reinforce low-frequency signals using the subwoofer when playing back sources such as CDs.

Cross over CrossOver

Use this feature to select a cross-over (cut-off) frequency for all low-frequency signals. All frequencies below the selected frequency will be sent to the subwoofer. Choices: 40Hz, 60Hz, 80Hz, 90Hz, 100Hz, 110Hz, 120Hz, 160Hz, 200Hz

Subwoofer phase SWFR PHASE

If bass sounds are lacking or unclear, use this feature to switch the phase of your subwoofer.

Choices: NRM (normal), REV (reverse)

- Select NRM if you do not want to reverse the phase of your subwoofer.
- Select REV to reverse the phase of your subwoofer.

English

■ Speaker level B)SP LEVEL

Use these settings to manually balance the speaker levels between the front left or surround left speakers and each speaker selected in SPEAKER SET (page 46).

Choices: -10.0 dB to +10.0 dB

- FR adjusts the balance of the front left and front right speakers.
- C adjusts the balance of the front left and center speakers.
- SL adjusts the balance of the front left and surround left speakers.
- SB adjusts the balance of the surround left and surround back speakers.
- SR adjusts the balance of the surround left and surround right speakers.
- SWFR adjusts the balance of the front left speaker and subwoofer.

`\o':

To calibrate, use the test tone feature (see page 43).

■ Speaker distance COSP DISTANCE

Use this feature to manually input the distance of each speaker and adjust the delay applied to respective channel. Ideally, each speaker should be the same distance from the main listening position. However, this is not possible in most home situations. Thus, a certain amount of delay must be applied to the sound from each speaker so that all sound will arrive at the listening position at the same time.

Unit UNIT

Choices: meters (m), feet (ft)

Initial setting:

U.S.A. and Canada models: feet (ft)

Other models: meters (m)

- Select meters to input speaker distances in meters.
- Select feet to input speaker distances in feet.

Speaker distances

Choices: 0.3 to 24.00 m (1 to 80 ft)

- **FRONT L** adjusts the distance of the front left speaker. Initial setting: 3.0 m (10.0 ft)
- **FRONT R** adjusts the distance of the front right speaker. Initial setting: 3.0 m (10.0 ft)
- **CENTER** adjusts the distance of the center speaker. Initial setting: 3.0 m (10.0 ft)
- **SURR L** adjusts the distance of the surround left speaker. Initial setting: 3.0 m (10.0 ft)
- **SURR R** adjusts the distance of the surround right speaker. Initial setting: 3.0 m (10.0 ft)
- SURR B adjusts the distance of the surround back speaker. Initial setting: 2.10 m (7.0 ft)
- **SWFR** adjusts the distance of the subwoofer. Initial setting: 3.0 m (10.0 ft)

■ Center graphic equalizer DOCENTER GEQ

Use this feature to adjust the built-in 5-band graphic equalizer for the center channel so that the tonal quality of the center speaker matches that of the left and right main speakers. You can make adjustments listening to the currently selected source component or a test tone. You can adjust 5 frequency bands:

100Hz, 300Hz, 1kHz, 3kHz, 10kHz

Choices: -6 to +6 dB

- Select ON to output test tones from the front left and center speakers, and adjust the tonal quality of the center speaker.
- Select OFF to stop the test tone and output the currently selected source component.

■ Low-frequency effect level E)LFE LEVEL

Use to adjust the output level of the LFE (low-frequency effect) channel according to the capacity of your subwoofer or headphones. The LFE channel carries low-frequency special effects which are only added to certain scenes. This setting is effective only when this unit decodes Dolby Digital or DTS signals.

Choices: -20 to 0 dB

Speaker SP LFE

Select to adjust the speaker LFE level.

Headphone HP LFE

Select to adjust the headphone LFE level.

Note

Depending on the "LFE LEVEL" setting, some signals may not be output from the SUB WOOFER OUTPUT jack.

■ Dynamic range F)D. RANGE

Use to select the amount of dynamic range compression to be applied to your speakers or headphones. This setting is effective only when the unit is decoding Dolby Digital and DTS signals.

Choices: **MAX** (maximum), STD (standard), MIN (minimum)

Speaker SP D.R

Select to adjust the speaker compression.

Headphone HP D.R

Select to adjust the headphone compression.

- Select MAX for feature films.
- Select STD for general use.
- Select MIN for listening to sources at low volume levels.

■ Audio set G)AUDIO SET

Use to customize this units overall audio settings.

Audio mute A. MUTE

Use to adjust how much the mute function reduces the output volume.

Choices: MUTE, -20 dB

- Select MUTE to completely halt all output of sound.
- Select –20 dB to reduce the current volume by 20 dB.

Audio delay A. DELAY

Use to delay the sound output and synchronize it with the video image. This may be necessary when using certain LCD monitors or projectors.

Choices: 0 to 160 mS

2 INPUT MENU

Use to reassign digital input/outputs and select the input mode.

■ Input/output assignment ADIZO ASSIGN

You can assign jacks according to the component to be used if this unit's initial settings do not correspond to your needs. Change the following parameters to reassign the respective jacks and effectively connect more components. Once the inputs have been reassigned, you can select the corresponding component by using INPUT on the front panel or the input selector buttons on the remote control.

For COMPONENT VIDEO jacks A (C. U[A]) and B

(C.V[B])

Choices: DVD, V-AUX, DTV/CBL, VCR

[HTR-5750]

For OPTICAL OUTPUT jack 1 (OUT(1))

Choices: MD/CD-R, CD, V-AUX, DTV/CBL, VCR, DVD For OPTICAL INPUT jacks 2 (IN(2)), 3 (IN(3)) and 4 (IN(4))

Choices: CD, V-AUX, DTV/CBL, VCR, DVD, MD/CD-R

For COAXIAL INPUT jack 5 (IN(5))

Choices: CD, V-AUX, DTV/CBL, VCR, DVD, MD/CD-R

[HTR-5740]

For OPTICAL INPUT jacks 1 (IN(1)) and 2 (IN(2))

Choices: CD, V-AUX, DTV/CBL, VCR, DVD, MD/CD-R

For COAXIAL INPUT jack 3 (IN(3))

Choices: CD, V-AUX, DTV/CBL, VCR, DVD, MD/CD-R

Notes

- You cannot select a specific item more than once for the same type of jack.
- When you connect a component to both the COAXIAL and OPTICAL jacks, priority is given to the input signals from the COAXIAL jack.

English

■ Input mode B) INPUT MODE

Use this feature to designate the input mode for sources connected to the DIGITAL INPUT jacks when you turn on this unit (see page 31 for details about the input mode). Choices: **AUTO**, LAST

- Select AUTO to allow this unit to automatically detect the type of input signal and select the appropriate input mode.
- Select LAST to set this unit to automatically select the last input mode used for that source.

Note

Even if LAST is selected, the last setting for the EX/ES button will not be recalled.

3 OPTION MENU

Use to adjust the optional system parameters.

■ Display set ADDISPLAY SET

Dimmer DIMMER

Use to adjust the brightness of the front panel display. Choices: -4 to $\mathbf{0}$

Video conversion (HTR-5750 only) U CONU.

Use this feature to turn on/off conversion of composite (VIDEO) signals to S-Video signals. This allows you to output converted video signals from the S VIDEO jacks when no S-Video signals are input.

Choices: ON, OFF

- Select OFF not to convert any signals.
- Select ON to convert composite signals to S-Video signals.

Note

Converted video signals are only output to the MONITOR OUT jacks. When recording you must make the same type of video connections (i.e., S-Video) between each component.

■ Memory quard B)MEMORY GUARD

Use this feature to prevent accidental changes to DSP program parameter values and other system settings.

Choices: ON, **OFF**Select ON to protect:

- DSP program parameters
- All SET MENU items
- All speaker levels

When "MEMORY GUARD" is set to ON, you cannot use the test tone or select any other SET MENU items.

■ Parameter initialization COPARAM. INI

Use this feature to initialize the parameters for each sound field program within a sound field program group. When you initialize a sound field program group, all of the parameter values within that group revert to their initial settings.

Press the corresponding numeric button for the sound field program that you want to initialize.

An asterisk (*) next to a program number means that the parameter values have been changed from their initial settings.

Notes

- You cannot automatically revert to the previous parameter settings once you initialize a sound field program group.
- You cannot separately initialize individual sound field programs.
- You cannot initialize any program groups when "MEMORY GUARD" is set to ON.

■ Zone set D)ZONE SET

Use to specify the location of speakers connected to the SPEAKERS B terminals.

Speaker B set SP B

Use this feature to select the location of the front speakers connected to the SPEAKERS B terminals.

Choices: FRONT, ZONE B

- Select FRONT to turn on/off SPEAKERS A and B
 when the speakers connected to the SPEAKERS B
 terminals are set in the main room.
- Select ZONE B if the speakers connected to the SPEAKERS B terminals are set in another room. If SPEAKERS A is turned OFF and SPEAKERS B is turned ON, all the speakers including the subwoofer in the main room are muted and the unit outputs sound from SPEAKERS B only.

Notes

- If you connect headphones to the PHONES jack on the unit when "SP B" is set to ZONE B, the sound is output from both headphones and SPEAKERS B.
- If a DSP program is selected when "SP B" is set to ZONE B, the unit automatically enters the Virtual CINEMA DSP mode.

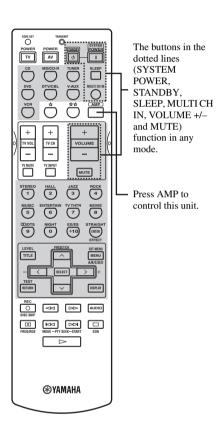
REMOTE CONTROL FEATURES

In addition to controlling this unit, the remote control can also operate other A/V components made by YAMAHA and other manufacturers. To control other components, you must set up remote control with the appropriate manufacturer codes.

Control area

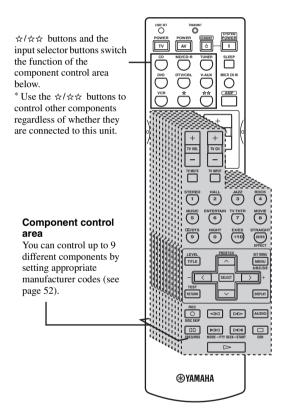
■ Controlling this unit

The shaded areas below can be used to control this unit when the AMP mode is selected. Press AMP to activate the AMP mode.



■ Controlling other components

The shaded areas below can be used to control other components. Each button has a different function depending on the selected components. Select the component you want to control by pressing an input selector button.



Setting manufacturer codes

You can control other components by setting the appropriate manufacturer codes. Codes can be set up for each input area. For a complete list of available manufacturer codes, refer to "LIST OF

MANUFACTURER CODES" at the end of this manual.

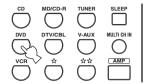
The following table shows the factory preset component (Library: component category) and the manufacturer code for each area.

Input area	Component category (Library)	Manufacturer	Code
CD	CD	YAMAHA	0005
MD/CD-R	MD	YAMAHA	0024
TUNER	TUNER	YAMAHA	0003
DVD	DVD	YAMAHA	0098
DTV/CBL	_	-	_
V-AUX	-	-	-
VCR	_	-	-
☆	_	-	_
ά ά	-	-	-

Note

You may not be able to operate your YAMAHA component even if a YAMAHA manufacturer code is initially set as listed above. In this case, try to set other YAMAHA manufacturer code(s).

1 Press an input selector button or ☆/☆☆ to select the component you want to set up.



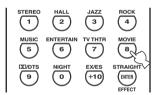
2 Press CODE SET using a ballpoint pen or similar object.

The TRANSMIT indicator on the remote control flashes twice.



3 Press the numeric buttons to enter the four digit manufacturer's code for the component to be used.

Refer to "LIST OF MANUFACTURER CODES" at the end of this manual.



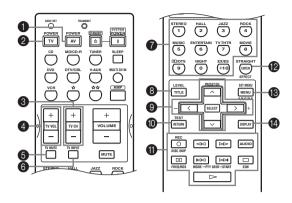
The TRANSMIT indicator on the remote control flashes twice.

Notes

- If the manufacturer of your component has more than one code, try each of them until you find the correct one.
- If you wait for more than 30 seconds during step 3, the setup process is canceled. If this happens, start over from step 2.

Controlling other components

Once you set the appropriate manufacturer codes, you can use this remote to control your other components. Note that some buttons may not correctly operate the selected component. Use the input selector buttons to select the component you want to operate. The remote control automatically switches to the appropriate control mode for that component.



	DVD player/ DVD recorder	VCR	Digital TV/ Cable TV	CD player	MD/CD recorder	Tuner
AV POWER	Power *1	Power *1	VCR power *3	Power *1	Power *1	Power *1
TV POWER	TV power *2	TV power *2	TV power	TV power *2	TV power *2	TV power *2
TV CH +	TV channel up *2	TV channel up *2	TV channel up	TV channel up *2	TV channel up *2	TV channel up *2
TV CH –	TV channel down *2	TV channel down *2	TV channel down	TV channel down *2	TV channel down *2	TV channel down *
TV VOL +	TV volume up *2	TV volume up *2	TV volume up	TV volume up *2	TV volume up *2	TV volume up *2
TV VOL -	TV volume down *2	TV volume down *2	TV volume down	TV volume down *2	TV volume down *2	TV volume down *
TV MUTE	TV mute *2	TV mute *2	TV mute	TV mute *2	TV mute *2	TV mute *2
TV INPUT	TV input *2	TV input *2	TV input	TV input *2	TV input *2	TV input *2
1-9, 0, +10	Numeric buttons	Numeric buttons	Numeric buttons	Numeric buttons	Numeric buttons	Preset stations (1-8)
TITLE	Title					
PRESET/CH ^	Up	VCR channel up				Preset up
PRESET/CH \	Down	VCR channel down				Preset down
PRESET/CH <	Right					
PRESET/CH>	Left					
RETURN	Return					
REC/DISC SKIP	Disc skip (player) Rec (recorder)	Rec	VCR rec *3		Rec (MD)	
\triangleright	Play	Play	VCR play *3	Play	Play	
44	Search backward	Search backward	VCR search backward *3	Search backward	Search backward	
$\triangleright \triangleright$	Search forward	Search forward	VCR search forward *3	Search forward	Search forward	
AUDIO	Audio					
00	Pause	Pause	VCR pause *3	Pause	Pause	
M	Skip backward			Skip backward	Skip backward	
M	Skip forward			Skip forward	Skip forward	
	Stop	Stop	VCR stop *3	Stop	Stop	
ENTER	Title/Index	Enter	Enter	Index	Index	
MENU	Menu					A/B/C/D/E
DISPLAY	Display		Display	Display	Display	

^{*1} This button functions only when the original remote control of the component has a POWER button.

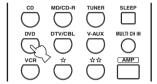
^{*2} These buttons can operate your TV without switching the input if the manufacturer code is set in DTV/CBL or ☆☆.

When the manufacturer code for your TV is set up in both the DTV/CBL and ☆☆ areas, priority is given to the signal in the DTV/CBL area.

^{*3} These buttons can operate your VCR without switching the input to VCR if the manufacturer code is set in VCR.

Clearing setup manufacturer codes

- Clearing a setup manufacturer code for component control
- 1 Press an input selector button or ☆/☆☆ to select the component control for which you want to clear the manufacturer code.



2 Press CODE SET using a ballpoint pen or similar object.

The TRANSMIT indicator on the remote control flashes twice.



- If you do not press any button within 30 seconds after step 2, the clearing process is canceled. If this happens, start over from step 1.
- 4 Enter the code number "0000".

The TRANSMIT indicator on the remote control flashes twice, and the manufacturer code for the selected component is cleared.

_`@´:

You can clear all setup manufacturer codes at once by entering the code number "9990".

EDITING SOUND FIELD PARAMETERS

What is a sound field

What really creates the rich, full tones of a live instrument are the multiple reflections from the walls of the room. In addition to making the sound "live", these reflections enable us to tell where the player is situated, and the size and shape of the room in which we are sitting.

Elements of a sound field

In any environment, in addition to the direct sound coming straight to our ears from the player's instrument, there are two distinct types of sound reflections that combine to make up the sound field:

Early reflections

Reflected sounds reach our ears extremely rapidly (50 ms – 100 ms after the direct sound), after reflecting from one surface only — for example, from the ceiling or a wall. Early reflections actually add clarity to the direct sound.

Reverberations

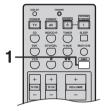
These are caused by reflections from more than one surface — walls, ceiling, the back of the room — so numerous that they merge together to form a continuous sonic "afterglow". They are non-directional, and lessen the clarity of the direct sound.

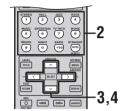
Direct sound, early reflections and subsequent reverberation taken together help us to determine the subjective size and shape of the room, and it is this information that the digital sound field processor reproduces in order to create sound fields.

If you could create the appropriate early reflections and subsequent reverberations in your listening room, you would be able to create your own listening environment. The acoustics in your room could be changed to those of a concert hall, a dance floor, or virtually any size room at all. This ability to create sound fields at will is exactly what YAMAHA has done with the digital sound field processor.

Changing parameter settings

You can enjoy good quality sound with the factory preset parameters. Although you do not have to change the initial settings, you can change some of the parameters to better suit the input source or your listening room.

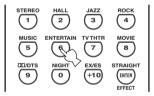




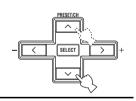
1 Press AMP.



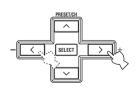
2 Select the sound field program you want to adjust.



3 Press ∧ / ∨ to select the parameters.



4 Press </>
/> to change the parameter value.



5 Repeat steps 2 through 4 as necessary to change other program parameters.

Note

You cannot change parameter values when "MEMORY GUARD" is set to ON. If you want to change the parameter values, set "MEMORY GUARD" to OFF (see page 49).

Memory back-up

The memory back-up circuit prevents the stored data from being lost even if this unit is set in the standby mode, the power cord is disconnected from the AC outlet, or the power supply is temporarily cut due to power failure. However, if the power is cut for more than one week, the parameter values will return to the factory settings. If this happens, edit the parameter value again.

Resetting parameters to the factory presets

To reset a certain parameter

Select the parameter you want to reset, then press $\langle \rangle$ repeatedly to select the factory preset (the display pauses momentarily at the factory preset before proceeding to the next value).

To reset all parameters

Use PARAM. INI (see page 50).

SOUND FIELD PARAMETER DESCRIPTIONS

You can adjust the values of certain digital sound field parameters so the sound fields are recreated accurately in your listening room. Not all of the following parameters are found in every program.

■ DSP LEVEL

Function: This parameter adjusts the level of all the DSP effect sounds within a narrow range.

Description: Depending on the acoustics of your listening room, you may want to increase or decrease the DSP

effect level relative to the level of the direct sound.

Control range: -6 dB - +3 dB

■ DELAY (Delay)

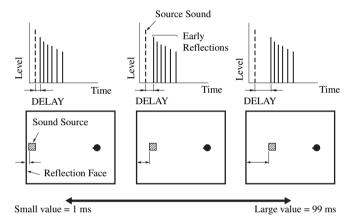
Function: This parameter changes the apparent distance from the source sound by adjusting the delay between the

direct sound and the first reflection heard by the listener.

Description: The smaller the value, the closer the sound source seems to the listener. The larger the value, the farther

it seems. For a small room, set to a small value. For a large room, set to a large value.

Control range: 1 – 99 msec



For 6ch Stereo

Function: These parameter adjusts the volume level for each channel in 6-channel stereo mode.

Control Range: 0 - 100%

- CT LEVEL (Center level)
- SL LEVEL (Surround left level)
- SR LEVEL (Surround right level)
- SB LEVEL (Surround back level)

For PRO LOGIC IIx Music and PRO LOGIC II Music

■ PANORAMA

Function: Extends the front stereo image to include the surround speakers for wraparound effect.

Choices: OFF/ON, initial setting is OFF.

■ DIMENSION

Function: Gradually adjusts the sound field either towards the front or towards the rear. Control range: -3 (towards the rear) to +3 (towards the front), initial setting is STD (standard).

■ CT WIDTH (Center width)

Function: Adjusts the center image from all three front speakers to varying degrees. A larger value adjusts the

center image towards the front left and right speakers.

Control range: 0 (center channel sound is output only from center speaker) to 7 (center channel sound is output only

from front left and right speakers), initial setting is 3.

For PRO LOGIC IIx Movie, Music and Game

■ PLII/PLIIx (Pro Logic II/Pro Logic IIx)

Function: Switches the type of Pro Logic decoding to be used. PLII decoding creates 5.1-channel sound from

2-channel sources. PLIIx decoding creates 6.1-channel sound from 2-channel sources.

Choices: PLII, PLIIx

For DTS Neo:6 Music

■ C. IMAGE (Center image)

Function: This parameter adjusts the center image from all three front speakers to varying degrees.

Control range: 0 - 0.5

TROUBLESHOOTING

Refer to the chart below when this unit does not function properly. If the problem you are experiencing is not listed below or if the instruction below does not help, set this unit to the standby mode, disconnect the power cord, and contact the nearest authorized YAMAHA dealer or service center.

■ General

Problem	Cause	Remedy	Refer to page
This unit fails to turn on when STANDBY/	The power cord is not connected or the plug is not completely inserted.	Connect the power cord firmly.	_
ON (or SYSTEM POWER) is pressed,	The impedance setting is incorrect.	Set the impedance to match your speakers.	20
or enters in the standby mode soon after the power has been turned on.	The protection circuitry has been activated.	Make sure all speaker wire connections on this unit and on all speakers are secure and that the wire for each connection does not touch anything other than its respective connection.	11-12
	This unit has been exposed to a strong external electric shock (such as lightning and strong static electricity).	Set this unit in the standby mode, disconnect the power cord, plug it back in after 30 seconds, then use it normally.	_
No sound	Incorrect input or output cable connections.	Connect the cables properly. If the problem persists, the cables may be defective.	14-17
	The input mode is set to DTS or ANALOG.	Select AUTO.	31
	No appropriate input source has been selected.	Select an appropriate input source with INPUT, MULTI CH INPUT or the input selector buttons.	25
	Speaker connections are not secure.	Secure the connections.	11
	The front speakers to be used have not been selected properly.	Select the front speakers with SPEAKERS A and/or B.	25
	The volume is turned down.	Turn up the volume.	_
	The sound is muted.	Press MUTE or any operation buttons of this unit to cancel a mute and adjust the volume.	26
	The input mode is set to ANALOG while playing a source encoded with a DTS signal.	Set the input mode to AUTO or DTS.	31
	The signals this unit cannot reproduce are being received from a source component e.g.: a CD-ROM.	Play a source whose signals this unit can reproduce.	_
No picture	The output and input for the picture are connected to different types of video jacks.	Turn on the video conversion function (HTR-5750 only).	49

Problem Cause Remedy		Remedy	Refer to page
The sound suddenly	The protection circuitry has been activated	Check that the impedance selector setting is correct.	20
goes off.	because of a short circuit, etc.	Check that the speaker wires are not touching each other and then turn this unit back on.	_
	The sleep timer has turned the unit off.	Turn on the power, and play the source again.	_
	The sound is muted.	Press MUTE to cancel a mute.	26
Only the speaker on one side can be	Incorrect cable connections.	Connect the cables properly. If the problem persists, the cables may be defective.	11
heard.	Incorrect balance settings in SET MENU.	Adjust the SP LEVEL settings.	47
Only the center speaker outputs substantial sound.	When playing a monaural source with a CINEMA DSP program, the source signal is directed to the center channel, and the front and surround speakers output effect sounds.		
No sound from the	The sound field programs are turned off.	Press STRAIGHT (EFFECT) to turn them on.	31
effect speakers.	You are using a source or program combination that does not output sound from all channels.	Try another sound field program.	27, 39
No sound from the center speaker.	The output level of the center speaker is set to minimum.	Raise the level of the center speaker.	47
	"CENTER" in SET MENU is set to NONE.	Select the appropriate setting for the center speaker.	46
	One of the Hi-Fi DSP programs (except for 6ch Stereo) has been selected.	Try another sound field program.	27, 39
No sound from the surround speakers.	The output level of the surround speakers is set to minimum.	Raise the output level of the surround speakers.	47
	"SURR LR" in SET MENU is set to NONE.	Select the appropriate setting for the surround left and right speakers.	46
	A monaural source is being played with STRAIGHT.	Press STRAIGHT (EFFECT) to turn on the sound fields.	_
No sound from the surround back speaker.	"SURR LR" in SET MENU is set to NONE.	If the surround left and right speakers are set to NONE, the surround back speaker setting is automatically set to NONE. Select the appropriate setting for the surround speakers.	46
	"SURR B" in SET MENU is set to NONE.	Select LRG or SML.	46
No sound from the subwoofer.	"BASS OUT" in SET MENU is set to FRONT when a Dolby Digital or DTS signal is being played.	Select SWFR or BOTH.	46
	"BASS OUT" in SET MENU is set to SWFR or FRNT when a 2-channel source is being played.	Select BOTH.	46
	The source does not contain low bass signals.		

Problem	Cause	Remedy	Refer to page
Dolby Digital or DTS sources cannot be played. (Dolby Digital	The connected component is not set to output Dolby Digital or DTS digital signals.	Make an appropriate setting following the operations instructions for your component.	_
or DTS indicator in the front panel display does not light up.)	The input mode is set to ANALOG.	Set the input mode to AUTO or DTS.	31
A "humming" sound can be heard.	Incorrect cable connections.	Firmly connect the audio plugs. If the problem persists, the cables may be defective.	_
The volume level cannot be increased, or the sound is distorted.	The component connected to the OUT (REC) jacks of this unit is turned off.	Turn on the power to the component.	_
The sound effect cannot be recorded.	It is not possible to record the sound effect with a recording component.		
[HTR-5750] A source cannot be	The source component is not connected to this unit's DIGITAL INPUT jacks.	Connect the source component to the DIGITAL INPUT jacks.	13-17, 38
recorded by a digital recording component connected to this DIGITAL OUTPUT jack.	Some components cannot record the Dolby Digital or DTS sources.		
A source cannot be recorded by an analog component connected to the AUDIO OUT jacks.	The source component is not connected to this unit's analog AUDIO IN jacks.	Connect the source component to the analog AUDIO IN jacks.	13-17, 38
The sound field parameters and some other settings on this unit cannot be changed.	"MEMORY GUARD" in SET MENU is set to ON.	Select OFF.	49
This unit does not operate properly.	The internal microcomputer has been frozen by an external electric shock (such as lightning or excessive static electricity) or by a power supply with low voltage.	Disconnect the AC power cord from the outlet and then plug it in again after about 30 seconds.	_
"CHECK SP WIRES" appears in the front panel display.	Speaker cables are short circuited.	Make sure all speaker cables are connected correctly.	11
There is noise interference from digital or high-frequency equipment, or this unit.	This unit is too close to the digital or high-frequency equipment.	Move this unit further away from such equipment.	
The picture is disturbed.	The video source uses scrambled or encoded signals to prevent dubbing.		
This unit suddenly turns into the standby mode.	The internal temperature becomes too high and the overheat protection circuitry has been activated.	Wait about 1 hour for this unit to cool down and then turn it back on.	_

■ Tuner

	Problem	Cause	Remedy	Refer to page	
	FM stereo reception is noisy.	The characteristics of FM stereo broadcasts may cause this problem when the transmitter is too far away or	Check the antenna connections. Try using a high-quality directional FM antenna.	18	
		the antenna input is poor.	Use the manual tuning method.	34	
FM	There is distortion, and clear reception cannot be obtained even with a good FM antenna.	There is multipath interference.	Adjust the antenna position to eliminate multipath interference.	_	
	The desired station	The signal is too weak.	Use a high-quality directional FM antenna.	18	
	cannot be tuned in with the automatic tuning method.		Use the manual tuning method.	34	
	Previously preset stations can no longer be tuned in.	This unit has been disconnected for a long period.	Preset the stations again.	34	
	The desired station cannot be tuned in with	The signal is weak or the antenna connections are loose.	Tighten the AM loop antenna connections and orient it for best reception.	_	
	the automatic tuning method.		Use the manual tuning method.	34	
AM	There are continuous crackling and hissing noises.	Noises result from lightning, fluorescent lamps, motors, thermostats and other electrical equipment.	Use an outdoor antenna and a ground wire. This will help somewhat, but it is difficult to eliminate all noise.	_	
	There are buzzing and whining noises.	A TV set is being used nearby.	Move this unit away from the TV.	_	

■ Remote control

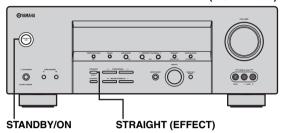
Problem	Cause	Remedy	Refer to page
The remote control does not work nor function properly.	Wrong distance or angle.	The remote control will function within a maximum range of 6 m (20 ft) and no more than 30 degrees offaxis from the front panel.	7
	Direct sunlight or lighting (from an inverter type of fluorescent lamp, etc.) is striking the remote control sensor of this unit.	Reposition this unit.	_
	The batteries are weak.	Replace all batteries.	3
	The manufacturer code was not correctly set.	Set the manufacturer code correctly using the "LIST OF MANUFACTURER CODES" at the end of this manual.	52
		Try to set another code for the same manufacturer using the "LIST OF MANUFACTURER CODES" at the end of this manual.	52
	Even if the manufacturer code is correctly set, there are some models that do not respond to the remote control.		

RESETTING THE FACTORY PRESETS

If you want to reset all of your unit's parameters for any reason, do the following. This procedure completely resets ALL parameters, including the SET MENU, level, assign and tuner presets.

Be sure this unit is in standby mode.

(U.S.A. model)



1 Hold down STRAIGHT (EFFECT) on the front panel and press STANDBY/ON.

"FACTORY PRESET" appears in the front panel display.

``@′≤

To cancel the initialization procedure without making any changes, press STANDBY/ON.

2 Press STRAIGHT (EFFECT) to select the desired setting.

Reset To reset the unit to its factory presets.
Cancel To cancel without making any changes.

3 Press STANDBY/ON to confirm your selection.

If you selected "Reset", the unit is reset to its factory presets and switches to standby mode.

If you selected "Cancel", the unit switches to standby mode and nothing is reset.

GLOSSARY

Audio formats

■ Dolby Digital

Dolby Digital is a digital surround sound system that gives you completely independent multi-channel audio. With 3 front channels (left, center, and right), and 2 surround stereo channels, Dolby Digital provides 5 full-range audio channels. With an additional channel especially for bass effects, called LFE (low frequency effect), the system has a total of 5.1-channels (LFE is counted as 0.1 channel). By using 2-channel stereo for the surround speakers, more accurate moving sound effects and surround sound environment are possible than with Dolby Surround. The wide dynamic range (from maximum to minimum volume) reproduced by the 5 full-range channels and the precise sound orientation generated using digital sound processing provide listeners with previously unheard of excitement and realism.

With this unit, any sound environment from monaural up to a 5.1-channel configuration can be freely selected for your enjoyment.

■ Dolby Digital Surround EX

Dolby Digital EX creates 6 full-bandwidth output channels from 5.1-channel sources. This is done using a matrix decoder that derives 3 surround channels from the 2 in the original recording. For the best results, Dolby Digital EX should be used with movie sound tracks recorded with Dolby Digital Surround EX. With this additional channel, you can experience more dynamic and realistic moving sound especially with scenes with "flyover" and "fly-around" effects.

■ Dolby Pro Logic II

Dolby Pro Logic II is an improved technique used to decode vast numbers of existing Dolby Surround software. This new technology enables a discrete 5-channel playback with 2 front left and right channels, 1 center channel, and 2 surround left and right channels (instead of only 1 surround channel for conventional Pro Logic technology). Music and Game modes are also available for 2-channel sources in addition to the Movie mode.

■ Dolby Pro Logic IIx

Dolby Pro Logic IIx is a new technology enabling discrete multi-channel playback from 2-channel or multi-channel sources. There is a Music mode for music, a Movie mode for movies (for 2-channel sources only) and a Game mode for games.

■ Dolby Surround

Dolby Surround uses a 4 channel analog recording system to reproduce realistic and dynamic sound effects: 2 front left and right channels (stereo), a center channel for dialog (monaural), and a surround channel for special sound effects (monaural). The surround channel reproduces sound within a narrow frequency range.

Dolby Surround is widely used with nearly all video tapes and laser discs, and in many TV and cable broadcasts as well. The Dolby Pro Logic decoder built into this unit employs a digital signal processing system that automatically stabilizes the volume on each channel to enhance moving sound effects and directionality.

■ DTS 96/24

DTS 96/24 offers an unprecedented level of audio quality for multi-channel sound on DVD-Video, and is fully backward-compatible with all DTS decoders. "96" refers to a 96 kHz sampling rate (compared to the typical 48 kHz sampling rate). "24" refers to 24-bit word length. DTS 96/24 offers sound quality transparent to the original 96/24 master, and 96/24 5.1-channel sound with full-quality full-motion video for music programs and motion picture soundtracks on DVD-video.

DTS (Digital Theater Systems)Digital Surround

DTS digital surround was developed to replace the analog soundtracks of movies with a 6-channel digital sound track, and is now rapidly gaining popularity in movie theaters around the world. Digital Theater Systems Inc. has developed a home theater system so that you can enjoy the depth of sound and natural spatial representation of DTS digital surround in your home. This system produces practically distortion-free 6-channel sound (technically, a left, right and center channels, 2 surround channels, plus an LFE 0.1 channel as a subwoofer, for a total of 5.1-channels). The unit incorporates a DTS-ES decoder that enables 6.1- channel reproduction by adding the surround back channel to existing 5.1-channel format.

■ Neo:6

Neo:6 decodes the conventional 2-channel sources for 6 channel playback by the specific decoder. It enables playback with the full-range channels with higher separation just like digital discrete signal playback. Two modes are available; "Music mode" for playing music sources and "Cinema mode" for movies.

Sound field programs

■ CINEMA DSP

Since the Dolby Surround and DTS systems were originally designed for use in movie theaters, their effect is best felt in a theater having many speakers and designed for acoustic effects. Since home conditions, such as room size, wall material, number of speakers, and so on, can differ so widely, it's inevitable that there are differences in the sound heard as well. Based on a wealth of actually measured data, YAMAHA CINEMA DSP uses YAMAHA original sound field technology to combine Dolby Pro Logic, Dolby Digital and DTS systems to provide the visual and audio experience of movie theater in the listening room of your own home.

■ SILENT CINEMA

YAMAHA has developed a natural, realistic sound effect DSP algorithm for headphones.

Parameters for headphones have been set for each sound field so that accurate representations of all the sound field programs can be enjoyed on headphones.

■ Virtual CINEMA DSP

YAMAHA has developed a Virtual CINEMA DSP algorithm that allows you to enjoy DSP sound field surround effects even without any surround speakers by using virtual surround speakers.

It is even possible to enjoy Virtual CINEMA DSP using a minimal two-speaker system that does not include a center speaker.

Audio information

■ ITU-R

ITU-R is the radio communication sector of the ITU (International Telecommunication Union). ITU-R recommends a standard speaker placement which is used in many critical listening rooms, especially for mastering purposes.

■ LFE 0.1 channel

This channel is for the reproduction of low bass signals. The frequency range for this channel is 20 Hz to 120 Hz. This channel is counted as 0.1 because it only enforces a low frequency range compared to the full-range reproduced by the other 5/6 channels in Dolby Digital or DTS 5.1/6.1-channel systems.

■ PCM (Linear PCM)

Linear PCM is a signal format under which an analog audio signal is digitized, recorded and transmitted without using any compression. This is used as a method of recording CDs and DVD audio. The PCM system uses a technique for sampling the size of the analog signal per very small unit of time. Standing for "pulse code modulation", the analog signal is encoded as pulses and then modulated for recording.

Sampling frequency and number of quantized bits

When digitizing an analog audio signal, the number of times the signal is sampled per second is called the sampling frequency, while the degree of fineness when converting the sound level into a numeric value is called the number of quantized bits.

The range of rates that can be played back is determined based on the sampling rate, while the dynamic range representing the sound level difference is determined by the number of quantized bits. In principle, the higher the sampling frequency, the wider the range of frequencies that can be played back, and the higher the number of quantized bits, the more finely the sound level can be reproduced.

Video signal information

■ Component video signal

With the component video signal system, the video signal is separated into the Y signal for the luminance and the PB and PR signals for the chrominance. Color can be reproduced more faithfully with this system because each of these signals is independent. The component signal is also called the "color difference signal" because the luminance signal is subtracted from the color signal. A monitor with component input jacks is required in order to use the component signal for output.

Composite video signal

With the composite video signal system, the video signal is composed of three basic elements of a video picture; color, brightness and synchronization data. A composite video jack on a video component transmits these three elements combined.

■ S-Video signal

With the S-Video signal system, the video signal normally transmitted using a pin cable is separated and transmitted as the Y signal for the luminance and the C signal for the chrominance through the S-Video cable. Using the S VIDEO jack eliminates video signal transmission loss and allows recording and playback of even more beautiful images.

SPECIFICATIONS

AUDIO SECTION	VIDEO SECTION • Video Signal Type				
Minimum RMS Output Power for Front, Center, Surround, Surround back	Signal to Noise Ratio				
20 Hz to 20 kHz, 0.06% THD, 8 Ω (HTR-5750)	-				
(HTR-5740) 85 W	Frequency Response (MONITOR OUT) Composite 5 Hz to 10 MHz, –3 dB				
Maximum Power (EIAJ) [Ching and Vario models]	Component				
[China and Korea models] 1 kHz, 10% THD, 8 Ω (HTR-5750)	S-Video (HTR-5750 only) 5 Hz to 10 MHz, –3 dB				
(HTR-5740) 125 W	FM SECTION				
Dynamic Power (IHF)	• Tuning Range				
8/6/4/2 Ω (HTR-5750) 120/155/190/235 W	[U.S.A. and Canada models]				
(HTR-5740) 115/150/185/230 W	[Other models] 87.50 to 108.00 MHz				
• DIN Standard Output Power [U.K. and Europe models] 1 kHz, 0.7% THD, 4 Ω (HTR-5740 only) 130 W	• Usable Sensitivity (IHF)				
•	Signal to Noise Ratio (IHF)				
 IEC Output Power [U.K. and Europe models] 1 kHz, 0.06% THD, 8 Ω (HTR-5740 only)	Mono/Stereo				
•	Harmonic Distortion (1 kHz)				
Damping Factor (IHF) 20 Hz to 20 kHz, 8 Ω100 or more	Mono/Stereo				
• Frequency Response	• Stereo Separation (1 kHz)				
CD terminal to Front L/R 10 Hz to 100 kHz, –3 dB	• Frequency Response				
• Total Harmonic Distortion CD, etc. to Front L/R (20 Hz to 20 kHz, 40 W, 8 $\Omega)$ 0.06%	AM SECTION • Tuning Range				
Signal to Noise Ratio (IHF-A Network)	[U.S.A. and Canada models] 530 to 1710 kHz				
CD (250 mV) to Front L/R, Effect Off100 dB	[Other models] 531 to 1611 kHz				
• Residual Noise (IHF-A Network)	• Usable Sensitivity				
Front L/R	OFNEDAL				
• Channel Separation (1 kHz/10 kHz)	GENERAL				
CD (5.1 $k\Omega$ terminated) to Front L/R 60 dB/45 dB	Power Supply [U.S.A. and Canada models] AC 120 V, 60 Hz				
• Tone Control (Front L/R)	[Australia model]				
BASS Boost/Cut	[China model] AC 220 V, 50 Hz				
TREBLE Boost/Cut ±10 dB/20 kHz	[Korea model]				
• Phones Output	[U.K. and Europe models] AC 230 V, 50 Hz				
Input Sensitivity/Input Impedance	Power Consumption [U.S.A. and Canada models]				
CD, etc. 200 mV/47 k Ω	[Other models]				
MULTI CH INPUT	• Standby Power Consumption				
Output Level/Output Impedance REC OUT					
SUB WOOFER	AC Outlets [U.K. and Australia models]				
	• Dimension (W x H x D)				
	• Weight 11 kg (24 lbs 4 oz)				

LIST OF MANUFACTURER CODES

		DAYTRON	0941, 1031	JBL	0101	NECKERMAN	IN 1001
TV		DECCA	0271, 1001	JCB	0951	NEI	1001
A TANDY	0941	DIXI	0331, 1001, 1071	JENSEN	0311	NIKKAI	0271, 0431, 1001,
ABEX	1151	DUMONT	0891, 1031	JINXING	1531, 1541, 1551,		1151
ADMIRA	1141	DYNATECH	0881		1561, 1571, 1621,	NIKKO	0861, 1111, 1121
ADVENTURA		ELECTROBAL			1631, 1641, 1651,	NOVABEAM	0721
AIKO	1121	ELECTROHO:		nic diictor	1691, 1731	NTC	1121
AIWA	1481	ELECTRON	0941	JVC (VICTOR	0261, 0281, 0641,	ONWA	1051
AKAI ALBA	0331, 1101, 1111 0431	ELIN ELTA	1001 0331	KAWASHO	0651, 0661, 0841 0901	OPTIMUS OPTONICA	0551 0541, 1141
ALLERON	1091	EMERSON	0001, 0021, 0061,	KAYPANI	1021	ORION	0831, 1001
AMBASSADO		LINERSON	0071, 0081, 0091,	KENWOOD	0361, 1031, 1111	OSAKI	0271, 1151
AMSTRAD	0481, 1081		0111, 0811, 0821,	KLOSS	0631, 0721, 1131	OTTO VERSA	
ANAM	0251, 1041, 1051,		0831, 0841, 0851,	KTV	0921, 0941, 1011,	PANASONIC	0101, 0191, 0251,
	1061, 1071		0861, 0871, 0901,		1051, 1111		0751, 1041, 1311,
ANAM NATIO	NAL 1041		0921, 0941, 0981,	LEYCO	1001		1371, 1431
AOC	0361, 1021, 1031,		1011, 1031, 1051,	LG (GOLDSTA	AR) 0031, 0121,	PANDA	1541, 1721
	1111, 1161		1081, 1091		0351, 0411, 0731,	PENNY	0161, 0361, 0521,
ARCHER	1161	ENVISION	0361, 1111		0741, 0861, 0941,		0531, 0621, 0731,
AUDIOSONIC		ERRES	1001		0971, 1001, 1031,		0751, 0761, 0781,
AUDIOVOX	1051, 1161	ETRON	0331	LIECENIZ 0 T	1111, 1151		0791, 0861, 0931,
BAUER	0441	FERGUSON	1001	LIESENK & T			0941, 1031, 1041,
BAUR BEIJING	1001 1511, 1551, 1561	FINLUX FISHER	1001 0171, 0801, 0981	LLOYTRON LOEWE	0941 1001	PEONY	1111, 1151, 1161 1561, 1621
BELCOR	1031	FORMENTI	0441	LOGIK	0991, 1771	PHILCO	0361, 0581, 0591,
BELL & HOW		FORMONTI	1001	LUXMAN	0351, 0971	THLCO	0601, 0611, 0631,
BEON	1001	FORTRESS	1141	LXI	0101, 0621, 0761,		0961, 1031, 1111
BRADFORD	1051	FUJITSU	1091		0861, 0981	PHILIPS	0101, 0401, 1001
BROCKWOOI	D 1031	FUNAI	1051, 1091, 1501,	MAGNAVOX	0101, 0341, 0391,	PHONOLA	1001
BROKSONIC	1161		1521		0401, 0411, 0421,	PILOT	0941, 1031, 1111
BUSH	1001	FUTURETECI	H 1051		0581, 0591, 0601,	PIONEER	0511, 0551, 0871
CANDLE	0351, 0361, 0961,	GE	0131, 0161, 0201,		0611, 0631, 0661,	PORTLAND	0941, 1031, 1121
	0971, 1111, 1131		0751, 0761, 0771,		0961, 1111	PRICECLUB	0931
CAPEHART	1021		0781, 0791, 0811,	MAJESTIC	0991	PRISM	0751
CARVER	0101	CEC	0861, 1041	MARANTZ	0101, 0221, 0361,	PROSCAN	0761 1001
CATHAY CELEBRITY	1001 0951	GEC GEMINI	0271, 1001 0391	MARK	1001, 1111 1001	PROTECH PROTON	0501, 0861, 0941,
CENTURION		GENEXXA	0431	MATSUI	0271, 0331, 1001	TROTON	1021, 1161
	G 1541, 1551, 1561,	GIBRALTER	0891, 1031, 1111	MEDIATOR	1001	PULSAR	0891
	1621	GOODMANS/		MEGATRON	0691, 0861, 1161	PULSER	1031
CITIZEN	0351, 0361, 0921,		0271, 0661, 1001	MEI	1011	QUASAR	0251, 0751, 1041
	0931, 0941, 0961,	GRANADA	1001	M-ELECTRON	VIC 1001	QUELLE	1001
	0971, 1111, 1121,	GRUNDIG	1781, 1791, 1801,	MEMOREX	0331, 0571, 0861,	RADIO SHAC	K 0541, 0941,
	1131		1811, 1821, 1831,		0971, 0981, 0991,		1031, 1051,
CLAIRTONE	1011		1841, 1851, 1861,) (DOO	1771	D. DVOV.	1151
CLARIVOX	1001	CHAIDW	1871, 1881	METZ	1791, 1831, 1891,	RADIOLA	1001
CONCERTO CONROWA	0351, 0971 1751	GUNPY	1051, 1091		1901, 1911, 1921, 1931, 1941	RCA	0051, 0141, 0151, 0181, 0411, 0491,
CONTEC	0901, 0911, 1011,	HARMAN/KA HALLMARK		MGA	0361, 0561, 0571,		0531, 0761, 0771,
CONTLC	1051	HANSEATIC	1001	WON	0861, 1031, 1111		0871, 1031
CORANDO	0941	HARVARD	1051, 1061	MIDLAND	0751, 0761, 0891,	REALISTIC	0541, 0861, 0941,
CRAIG	0251, 1051	HINARI	1001, 1091		0941, 1151	10.12.0110	0971, 0981, 1031,
CROWN	0941, 1051	HITACHI	0181, 0351, 0671,	MITSUBISHI	0221, 0321, 0561,		1051, 1111, 1151
CURTIS MATI	HES 0161, 0361,		0681, 0691, 0701,		0571, 0661, 0861,	RHAPSODY	1011
	0931, 0941,		0711, 0871, 0941,		1031, 1101, 1381	R-LINE	1001
	0981, 1111		0971, 1351	MONTGOMEI		RUNCO	0891, 1111
CXC	1051	HYPSON	1001	MOTOROLA	1041, 1141	SAISHO	0331, 1081
DAEWOO	0291, 0301, 0331,	IMA	1051	MTC	0351, 0361, 0881,	SAMPO	0361, 0941, 1021,
	0721, 0941, 1001,	INDIANA	1001		0931, 0971, 1011,	CAMCING	1111, 1151
	1031, 1121, 1191, 1531, 1581, 1591,	INFINITY RE	FERENCE 0101	MULTITECH	1031, 1111 0881, 1051	SAMSUNG	0331, 0341, 0351, 0361, 0861, 0931,
	1601	INTERFUNK	1001	NAD	0551, 0621, 0861		0941, 0971, 1001,
DANSAI	1001	ITT	0611	NEC	0241, 0351, 0361,		1031, 1111, 1151
	- 	JANEIL	1131		0661, 0971, 1031,	SAMSUX	0941
					1111, 1321, 1711		

SANYO	0171, 0231, 0271,	VECTOR RESEA	ARCH	PARAGON	0386	(DBS)	
0.1	0661, 0801, 0911,		0361, 1111	PHILIPS	0036, 0216, 0306,		0076
	0981, 1231, 1251,		1001		0316, 0326, 0336,	HITACHI	0856
	1261	VIDEO CONCE			0346	MAGNAVOX	0886
SBR	1001		0101, 0211	PIONEER	0006, 0086	MEMOREX	0886
SCHEIDER	1001		0861, 1031	PIONEER BR5		PANASONIC	0896
SCIMITSU	1031		1131	PIONEER BR6		PHILIPS	0886
SCOTCH	0861		0101, 0361, 0451,		0696	SONY	0906
SCOTT	0831, 0861, 0941,		0541, 0581, 0591,	PIONEER BR9	00 0556	STAR CHOICE TOSHIBA	0866, 0916
	1031, 1051, 1091	(0601, 0611, 0771,	PULSAR	0386	UNIDEN	0886
SEARS	0101, 0161, 0171,	(0781, 0791, 0861,	RCA DIGITAL	SATELLITE	UNIDEN	0880
	0351, 0481, 0521,	(0971, 0991, 1031,	SYSTEM	0396, 0406		
	0621, 0761, 0801,		1091, 1111, 1771	REALISTIC	0136	VCR	
	0861, 0971, 0981,	WATSON	1001	REGENCY/EA	STERN0686	A TANDY	0902
	1091	XOGEGO	1611, 1621, 1661,	RUNCO	0386	ADVENTURA	
SHANGHAI	1561, 1681		1741, 1761	SAMSUNG	0276	AIKO	0982
SHARP	0461, 0471, 0541,		0361, 1031, 1111	SCIENTIFIC A	ATLANTA 175/475	AIWA	0992
	0661, 0911, 0941,		1001		0576	AKAI	0262, 0942, 0952,
	1141		0011, 0041, 0891,	SCIENTIFIC A			0962, 0972
SHOGUN	1031		0991, 1771		0366, 0586	AMERICAN H	
SIGNATURE	0991, 1771	ZONDA	1161	SCIENTIFIC A	ATLANTA 8650	AMSTRAD	0992
SIMPSON	0581, 0961				0566	ASA	0002, 0912
SOLAVOX	1151	CABLE TV		SIGNAL	0276	ASHA	0922
SONOKO	1001			SL MARX	0276	AUDIO DYNA	MICS 0202
SONTEC	1001		0256, 0376	SPECTAVISIO		AUDIOVOX	0912
SONY	0371, 0451, 0661,		0136	STANDARD C	COMPONENTS	BEAUMARK	0922
	0841, 0951, 1281,		0136, 0286	CTARCOM V	0186	BELL & HOW	ELL 0902
COLINIDECICA	1441		0076	STARCOM V STARGATE		BLAUPUNKT	0412
SOUNDESIGN	N 0861, 0961, 1051,	CABLETIME (SYLVANIA/TE	0276	BROKSONIC	0872, 0882, 0892
SOUNDWAVE	1091	CABLEVISION COLOUR VOICE	0196 E 0306, 0346	31LVANIA/11	0376, 0496	BUSH	0852
SPECTRICON		COMTRONICS	0216, 0276	TEKNIKA	0176	CALIX	0912
SOUAREVIEV		EAGLE COMTR		TELESERVICI		CANON	0862, 0932
SSS	1031, 1051		0276	TELEVIEW	0276	CCE	0852, 0982
STAR-LITE	1051, 1051		0066	TEXSCAN	0186, 0376	CITIZEN	0912, 0982
SUPREM	0951	ELECTRICORD		TFC	0026	COLT	0852
SUPRE-MACY			0266	TOCOM	0226, 0356	CRAIG	0832, 0842, 0852,
SURPA	0351, 0971		0116, 0126	TOCOM 5503A			0912, 0922
SYLVANIA	0101, 0361, 0441,	GEC CABLE SY		TOCOM 5503		CURTIS MATE	
	0581, 0591, 0601,		0196		0516	CURERVEY	0932
	0611, 0631, 0961,		0676	TOCOM TC56		CYBERNEX	0922
	1111		0666	TOSHIBA	0386	DAEWOO	0802, 0812, 0982
SYMPHONIC	0481	HAMLIN H6S	0656	TUDI	0046	DBX DYNATECH	0202
SYSLINE	1001	HAMLIN H8	0646	UNIKA	0136	ELECTROHON	0472, 0992 ME 0912
TANDY	0271, 0431, 1141	HAMLIN H9	0636	UNIVERSAL	0136, 0156, 0206,	ELECTROPHO	
TATUNG	0271, 0881, 1001,	JERROLD (0256		0286	EMEREX	0792
	1041, 1161	JERROLD 400L	0626	VIDEOWAY	0096	EMERSON	0072, 0132, 0142,
TCL	1561, 1631, 1701	JERROLD 450L		VIEWSTAR	0216	EMERSOIT	0152, 0162, 0172,
TECHNICS	0751	JERROLD 550	0606	ZENITH	0246, 0386, 0486		0182, 0192, 0212,
TECHWOOD	0351, 0751, 0971	JERROLD OSD					0702, 0712, 0722,
TEKNIKA	0101, 0351, 0571,		0596	SATELLIT	F TUNER		0732, 0742, 0752,
	0931, 0941, 0961,	JERROLD SPRU					0762, 0772, 0782,
	0971, 0991, 1031,		0436	ALPHA STAR			0872, 0882, 0892,
	1051, 1091, 1121,	MAGNAVOX/PH		CHAPARRAL			0912, 0952, 0992,
TELETECH	1131, 1771		0416, 0426	ECHOSTAR GENERAL IN:	0836		1072
TELETECH TERA	0331 0501		0296 0386	GENERAL IN	0776, 0876	FINLUX	0002, 0992
THAKRAL	1671	MOVIE TIME		HTS	0836	FISHER	0682, 0692, 0842,
THORM	1001	NORTHCOAST	0016		WORK SYSTEMS		0902
TMK	0351, 0861, 0971,		0146	HOOHES IVE	0816	FUJI	0672, 0932
11111	1081		0106	JERROLD	0776, 0786	FUNAI	0992
TOSHIBA	0381, 0521, 0621,	OAK SIGMA 45		PANASONIC	0806	GARRARD	0992
	0661, 0931, 0981,	OAK SIGMA 55		PRIMESTAR	0776, 0786	GE	0662, 0822, 0932
	1301	PANASONIC TZ		RCA	0766	GO VIDEO	0642, 0652
TOSONIC	1011		0476	SONY	0796	GOODMANS	0402
TOTEVISION		PANASONIC TZ				GRADIENTE	
TRICAL	0911		0446			GRANDA	0612, 0902
UNIVERSAL		PANASONIC TZ				GRUNDIG HARLEY DAV	0002 IDSON
UNIVERSUM	1001	PANASONIC TZ	Z150/160			HARLET DAV	0992
		(0456				0//2

HARMAN/KA		PROSCAN	1002, 1012, 1022,	YAMAHA	0202, 0632	ALPINE	1215, 1305
	0632, 1082		1032, 1042, 1052,	ZENITH	0042, 0362, 0512,	AUDIO-TECH	
HARWOOD	0752, 0852		1062		0672	BSR	0245, 0655, 0775
HEADQUART		PULSAR	0512			CALIFORNIA	
HI-Q	0842	QUARTER	0612	DVD PLAY	'FR		0055
HINARI	0852	QUARTZ	0272, 0612			CAPETRONIC	
HITACHI	0102, 0562, 0572,	QUASAR	0382, 0392, 0932	AKAI	0058	CARRERA	0245
	0582, 0592, 0602,	RADIO SHACI	,	AIWA	0218	CARVER	0285, 1135
	0992	RADIX	0912	DENON	0188	CASIO	0345
ITT	0942	RANDEX	0912	HITACHI	0198	CROWN	0185
JVC (VICTOR	0202, 0522, 0532,	RCA	0112, 0382, 0392,	JVC (VICTOR		CURTIS MATI	
WENNINGOD	0542, 0552		0482, 0592, 0602,	KENWOOD	0148	DENON	0275, 0875, 0885
KENWOOD	0202, 0542, 0612,	DE LI IOMIC	0662, 0822, 0942	LG (GOLDSTA		DEUAL (E)	0505
121 11	0632, 0902	REALISTIC	0402, 0472, 0612,		0128	DYNAMIC BA	` '
KLH	0852		0682, 0842, 0902,	MITSUBISHI		EMEDGON	0555
KODAK	0912, 0932		0912, 0922, 0932,	ONKYO	0068, 0128	EMERSON	0205, 0325, 1105
LG (GOLDST		DICOH	0992	PANASONIC	0028	EROICA	1275
LLOVD	0912	RICOH	0352, 0362	PHILIPS	0098, 0128	FISHER	0095, 0555, 0925,
LLOYD	0992	SAISHO	0212, 0582, 0722,	PIONEER	0108, 0118 0158	CARRARD	1005 0365
LOGIK	0852 0942	CALODA	0732, 0742, 0772	PROSCAN		GARRARD	
LUXOR LXI		SALORA	0612, 0762	RCA	0158	GENEXXA	0305, 0325, 1105
	0022, 0912	SAMSUNG	0212, 0312, 0922, 0962	SAMSUNG SHARP	0078 0038	TAKWAN/KA	RDON 0105, 0175, 0465, 0995
MAGNAVOX	0002, 0482, 0492, 0502, 0512, 0932	SANKY	0472, 0512	SONY	0038	HITACHI	0405, 0995
MACNIN			0292, 0542, 0832			ппасп	
MAGNIN	0922	SANSUI		TECHNICS	0028	INIZEI	0815
MARANTZ	0002, 0202, 0402,	SANYO	0242, 0612, 0842,	THOMSON	0168	INKEL JVC (VICTOR	0115, 0395
MADTA	0632, 0932 0912	CDD	0902, 0922	TOSHIBA	0048, 0128		
MARTA MATSUSHITA		SBR SCHEIDER	0002, 0282 0852	YAMAHA ZENITH	0008, 0028, 0098 0128	KENWOOD	0045, 0095, 0405,
MATSUI	0722	SCOTT	0342, 0712, 0762,	ZENIIT	0128		0585, 0725, 0735, 0745, 0755, 0895
MEI	0222, 0932	30011	0872, 0882, 0892			KYOCERA	0025
MEMOREX	0232, 0242, 0472,	SEARS	0302, 0592, 0602,	DVD REC	ORDER	LG (GOLDSTA	
MEMOREA	0512, 0612, 0842,	SEARS	0612, 0682, 0692,	PANASONIC	0238, 0248, 0258	LU (UULDS17	1265, 1335
	0902, 0912, 0922,		0842, 0902, 0912,	PHILIPS	0238, 0248, 0238	LUXMAN	0075, 0425, 0675,
	0902, 0912, 0922,		0932	PIONEER	0278, 0288, 0298	LUAMAN	0705, 0425, 0075, 0705, 0715, 0985
			0932	LIONEEK	0276, 0266, 0296		0703, 0713, 0903
MGA	0762 0052	CHADD	0402 0472	TOCHIDA	0269	MACNAVOV	0165 0215 0645
MGA TECHN	0762, 0952 OLOGY	SHARP	0402, 0472	TOSHIBA	0268	MAGNAVOX	
MGA MGA TECHN	OLOGY	SHINTOM	0852	TOSHIBA YAMAHA	0268 0208		0955
MGA TECHN	OLOGY 0922	SHINTOM SHOGUN	0852 0922			MAGNAVOX MARANTZ	0955 0215, 0235, 0375,
MGA TECHN	OLOGY 0922 0592, 0602	SHINTOM SHOGUN SINGER	0852 0922 0852		0208	MARANTZ	0955 0215, 0235, 0375, 0785, 1345
MGA TECHN	OLOGY 0922 0592, 0602 0452, 0462, 0542,	SHINTOM SHOGUN	0852 0922 0852 0032, 0332, 0352,	YAMAHA LD PLAYE	0208 ER	MARANTZ MCINTOSH	0955 0215, 0235, 0375, 0785, 1345 0355, 1085
MGA TECHN MINOLTA MITSUBISHI	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082	SHINTOM SHOGUN SINGER	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792,	LD PLAYE	0208 FR 0157	MARANTZ MCINTOSH MCS	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932	SHINTOM SHOGUN SINGER SONY	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932	YAMAHA LD PLAYE AIWA DENON	0208 ER 0157 0147	MARANTZ MCINTOSH	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235,
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992	SHINTOM SHOGUN SINGER SONY	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602	LD PLAYE AIWA DENON DISCO VISIO	0208 FR 0157 0147 N0017	MARANTZ MCINTOSH MCS MEMOREX	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992	SHINTOM SHOGUN SINGER SONY STS SUNPAK	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352	LD PLAYE AIWA DENON DISCO VISIOI FUNAI	0208 FR 0157 0147 N0017 0157	MARANTZ MCINTOSH MCS MEMOREX MGA	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442	SHINTOM SHOGUN SINGER SONY	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502,	LD PLAYE AIWA DENON DISCO VISIOI FUNAI HITACHI (E)	0208 IR 0157 0147 N0017 0157 0017	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292,	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992	AIWA DENON DISCO VISIOI FUNAI HITACHI (E) KENWOOD	0208 IR 0157 0147 N0017 0157 0017 0087, 0107	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542,	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992	LD PLAYE AIWA DENON DISCO VISIOI FUNAI HITACHI (E) KENWOOD MAGNAVOX	0208 IR 0157 0147 N0017 0157 0017 0087, 0107 0027	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255
MGA TECHNI MINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992	AIWA DENON DISCO VISIOI FUNAI HITACHI (E) KENWOOD MAGNAYOX MARANTZ	0208 CR 0157 0147 N0017 0157 0017 0017 0087, 0107 0027 0027	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685,
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAYOX MARANTZ MITSUBISHI	0208 CR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685,
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992	LD PLAYE AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD	0208 IR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515
MGA TECHNI MINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0992 0712, 0992 0992 0992 0992	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC	0208 (IR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0027 0137 0137 0077, 0177	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0300, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0912 0922 0412, 0932 0442, 0472, 0912	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0992 0712, 0992 0992 0992 0992 0992 0992 0992 0932 0322, 0912, 0932,	AIWA DENON DISCO VISIOI FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS	0208 OR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0137 0077, 0177 0027	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0477, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0412, 0932 0442, 0472, 0912 0402	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0992 0992 0992 0992 0992 0992 0992	AIWA DENON DISCO VISIOI FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER	0208 IR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 00137 0077, 0177 0027 0017, 0037, 0137	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495,
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0412, 0932 0442, 0472, 0912 0402 0212, 0722, 0742,	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0992 0992 0992 0992 0992 0992 0992 0992 0992 0992 0992 0992 0992 0992	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAYOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA	0208 CR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0137 0077, 0177 0027 0017, 0037, 0137 0167	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0135 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0402 0412, 0722, 0742, 0772	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0932 0322, 0912, 0932, 0992 0902 0325, 0912, 0932,	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC	0208 CR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0137 0077, 0177 0027 0017, 0037, 0137 0167 0157	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0135 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555,
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTIMUS OPTONICA ORION OSAKI	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0992, 0992 0852, 0992 0444 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0932 0322, 0912, 0932, 0992 V 0992 0325, 0912, 0932, 0992 0321, 0732, 0772, 0922	LD PLAYE AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP	0208 CR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0077, 0177 0027 0017, 0037, 0137 0157 0157 0157	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0595, 0845, 0855,
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0992, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092,	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0992 0992 0932 0322, 0912, 0932, 0992 V 252 0212, 0732, 0772, 0922 0062, 0302, 0342,	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY	0208 (IR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 00137 0137 0137 0077, 0177 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0595, 0845, 0855, 0865, 0895, 0935
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTIMUS OPTONICA ORION OSAKI	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0222, 0372, 0382,	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0992 0992 0992 0932 0322, 0912, 0932, 0992 V 2052 V 2052	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR	0208 (IR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0077, 0177 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117 0097	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0805, 0845, 0855, 0865, 0895, 0935 0055, 0825, 1095,
MINOLTA MINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION OSAKI PANASONIC	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0992 0852, 0992 0444 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0922 0412, 0772 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0992 0322, 0912, 0932, 0992 \$1 0252 0212, 0732, 0772, 0992 0062, 0302, 0342, 0622, 0682, 0712, 0762	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY	0208 (IR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 00137 0137 0137 0077, 0177 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0135 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0595, 0845, 0855, 0895, 0935, 0825, 1095, 1125
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTIMUS OPTONICA ORION OSAKI	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0222, 0372, 0382,	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0932 0322, 0912, 0932, 0992 \$1 0252 0212, 0732, 0772, 0922 0062, 0302, 0342, 0622, 0682, 0712, 0762 0912, 0922	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA	0208 (R 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 00137 0137 0137 0077, 0177 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117 0097 0007, 0067	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0595, 0845, 0855, 0895, 0935 0055, 0825, 1095, 1125
MINOLTA MINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION OSAKI PANASONIC	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932 0202, 0432, 0602, 0632, 0692, 0912,	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION UNITECH	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0932 0322, 0912, 0932, 0992 0922 0062, 0702, 0772, 0992 0062, 0302, 0342, 0622, 0682, 0712, 0762 0912, 0922 0991, 0922	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR	0208 (R 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 00137 0137 0137 0077, 0177 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117 0097 0007, 0067	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0595, 0845, 0855, 0856, 0895, 0935 0055, 0825, 1095, 1125 0905 0165, 0215
MGA TECHNI MINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTIMUS OPTONICA ORION OSAKI PANASONIC	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0992 0852, 0992 0444 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932 0412, 0932 0412, 0932 0412, 0932 0412, 0932 0412, 0932 0412, 0932 0412, 0932 0412, 0932 0412, 0932 0412, 0932 0932	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0932 0322, 0912, 0932, 0992 0922 0062, 0702, 0772, 0992 0062, 0302, 0342, 0622, 0682, 0712, 0762 0912, 0922 0991, 0922	LD PLAYE AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA	0208 RR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0077, 0177 0027 0017, 0037, 0137 0157 0127 0047, 0057, 0117 0097 0007, 0067	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS PIONEER	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0595, 0845, 0855, 0865, 0895, 0935 0055, 0825, 1095, 1125 0905 0165, 0215 0305, 0935, 1045
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION OSAKI PANASONIC PENNY PENTAX	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932 0202, 0432, 0602, 0632, 0692, 0912,	SHINTOM SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION UNITECH	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0322, 0912, 0932, 0992 \$10252	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA	0208 RR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0077, 0177 0027 0017, 0037, 0137 0157 0127 0047, 0057, 0117 0097 0007, 0067	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS PIONEER PROTON	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0595, 0845, 0895, 0935 0055, 0895, 0935 0055, 0895, 0935 0055, 0895, 0935 0056, 0895, 0935 0056, 0895, 0935 0057 0165, 0215 0305, 0935, 1045 0215, 1185
MGA TECHNI MINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTIMUS OPTONICA ORION OSAKI PANASONIC	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0477, 0932 0992, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 072, 072 0912 0402 0212, 0722, 0742, 0772 0912 0402 0212, 0722, 0742, 0772 0912 0402 0212, 0722, 0742, 0772 0912 0402 0212, 0722, 0742, 0772 0912 0402 0222, 0372, 0382, 0392, 0412, 0932 0202, 0432, 0602, 0632, 0692, 0912, 09922 0992	SHINTOM SHOGUN SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION UNITECH VECTOR RESI	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0322, 0912, 0932, 0992 \$10252	LD PLAYE AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA	0208 IR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 00137 0137 0077, 0177 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117 0097 0007, 0067	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS PIONEER	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0135 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0595, 0845, 0855, 1155 0255, 0895, 0935 0055, 0825, 1095, 1125 0905 0165, 0215 0305, 0935, 1045 0215, 1185 0055
MINOLTA MINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION OSAKI PANASONIC PENNY PENTAX PERDIO	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0992, 0992 0852, 0992 0442 0122, 0202, 0292, 0412, 0932 0412, 0932 0412, 0932 0412, 0772 0912 0402 0212, 0722, 0742, 0772 0912 0402 0212, 0722, 0742, 0772 0912 0402 0212, 0722, 0742, 0772 0912 0402 0212, 0722, 0742, 0772 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932 0202, 0432, 0602, 0632, 0692, 0912, 0922, 0932 0592, 0602 0992 0002, 0932	SHINTOM SHOGUN SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION UNITECH VECTOR RESI	0852 0922 0852 0032, 0332, 0352, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0322, 0912, 0932, 0992 092 8 0252 0212, 0732, 0772, 0922 0662, 0302, 0342, 0622, 0682, 0712, 0762 0912, 0922 0922 EARCH 0202, 0432, 0632 EPTS	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA CD PLAYE ACOUSTIC RI ADC	0208 CR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0027 0137 0137 0077, 0177 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117 0097 0007, 0067 CR ER ESEARCH 1295 0025, 0065	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS PIONEER PROTON QUASAR RCA	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0595, 0845, 0895, 0935 0055, 0895, 0935 0055, 0895, 0935 0055, 0895, 0935 0055, 0895, 0935 0056, 0895, 0935 0056, 0895, 0935 0057, 0805, 1125 0905 0165, 0215 0305, 0935, 1045 0215, 1185
MINOLTA MINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION OSAKI PANASONIC PENNY PENTAX PERDIO PHILCO	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932 0202, 0432, 0602, 0632, 0692, 0912, 0922, 0932 0592, 0602 0992 0002, 0932 0002, 0282, 0402,	SHINTOM SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION UNITECH VECTOR RESI	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 03552 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0932 0322, 0912, 0932, 0992 092 \$1 0252 0212, 0732, 0772, 0922 0062, 0302, 0342, 0622, 0682, 0712, 0762 0912, 0922 0922 EARCH 0202, 0432, 0632 EPTS 0202, 0432, 0632,	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA CD PLAYE ACOUSTIC RI ADC ADCOM	0208 CR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0137 017 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117 0097 0007, 0067 CR ER ESEARCH 1295 0025, 0065 0205, 0255, 1015	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC OIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS PIONEER PROTON QUASAR	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0135 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0865, 0895, 0825, 1095, 1125 0905 0165, 0215 0305, 0935, 1045 0215, 1185 0205, 0915, 1115 0205, 0225, 0235,
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION OSAKI PANASONIC PENNY PENTAX PERDIO PHILLO PHILLO PHILIPS	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932 0202, 0432, 0602, 0632, 0692, 0912, 0922, 0932 0002, 0932 0002, 0932 0002, 0282, 0402, 0492, 0932	SHINTOM SHOGUN SHOGUN SINGER SONY STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION UNITECH VECTOR RESI	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0992 0992 0932 0322, 0912, 0932, 0992 0062, 0302, 0342, 0622, 0682, 0712, 0762 0912, 0922 0922 EARCH 0202, 0432, 0632 EPTS 0202, 0432, 0632, 0952 0322, 0402, 0442,	AMAHA LD PLAYE AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA CD PLAYE ACOUSTIC RI ADC ADCOM ADS	0208 FR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0137 017 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117 0097 0007, 0067 FR ESEARCH 1295 0025, 0065 0205, 0255, 1015 0265	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS PIONEER PROTON QUASAR RCA REALISTIC	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0415, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0866, 0895, 0935 0055, 0825, 1095, 1125 0905 0165, 0215 0305, 0935, 1045 0215, 1185 0025, 0215, 1185 0025, 0225, 0235, 0325, 0325, 0325, 0325, 0325, 0325, 0325, 0325, 0325, 0325, 0325, 0325, 0355, 0325, 0325, 0325, 0355, 0325, 0325, 0325, 0325, 0325, 0325, 0325, 0325, 0325, 0355, 0375, 032
MINOLTA MINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION OSAKI PANASONIC PENNY PENTAX PERDIO PHILCO	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932 0442, 0932 0492, 0932 0592, 0602 0992 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932	SHINTOM SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION UNITECH VECTOR RESI	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0712, 0992 0992 0322, 0912, 0932, 0992 V 0252 0212, 0732, 0772, 0992 0602, 0302, 0342, 0622, 0682, 0712, 0762 0912, 0922 0992 0922 EARCH 0202, 0432, 0632, 0952	AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA CD PLAYE ACOUSTIC RI ADC ADCOM	0208 CR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0137 017 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117 0097 0007, 0067 CR ER ESEARCH 1295 0025, 0065 0205, 0255, 1015	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS PIONEER PROTON QUASAR RCA	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0865, 0895, 0825, 1095, 1125 0905 0165, 0215 0305, 0935, 1045 0215, 1185 00055 0025, 0915, 1115 0205, 0225, 0235, 0205, 0225, 0235,
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION OSAKI PANASONIC PENNY PENTAX PERDIO PHILCO PHILIPS PILOT	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0922, 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932 0202, 0432, 0602, 0632, 0692, 0912, 0922, 0932 0002, 0932 0002, 0932 0002, 0282, 0402, 0492, 0932	SHINTOM SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION UNITECH VECTOR RESI	0852 0922 0852 0032, 0332, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0932, 0992 0992 0992 0992 0932 0322, 0912, 0932, 0992 0 0322, 0912, 0932, 0992 0 0405, 0302, 0342, 0622, 0682, 0712, 0762 0912, 0922 0922 EARCH 0202, 0432, 0632, 0952 0322, 0402, 0472, 0482, 0602, 0712,	AMAHA LD PLAYE AIWA DENON DISCO VISION FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA CD PLAYE ACOUSTIC RI ADC ADCOM ADS	0208 IR 0157 0147 N0017 0157 0017 0087, 0107 0027 0027 0137 0137 0077, 0177 0027 0017, 0037, 0137 0157 0127 0047, 0057, 0117 0097 0007, 0067 IR ESEARCH 1295 0025, 0065 0205, 0255, 1015 0265 0295, 0945, 1035,	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS PIONEER PROTON QUASAR RCA REALISTIC REVOX ROTEL	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0865, 0895, 0935 0155, 0825, 1095, 1125 0905 0165, 0215 0305, 0935, 1045 0215, 1185 0025 0205, 0915, 1115 0205, 0225, 0235, 0325, 0555, 0845
MGA TECHNOMINOLTA MITSUBISHI MOTOROLA MTC MULTITECH NAD NEC NIKKO NOBLEX OLYMPUS OPTIMUS OPTONICA ORION OSAKI PANASONIC PENNY PENTAX PERDIO PHILCO PHILIPS PILOT	OLOGY 0922 0592, 0602 0452, 0462, 0542, 0762, 0952, 1082 0472, 0932 0992 0852, 0992 0442 0122, 0202, 0292, 0422, 0432, 0542, 0632 0912 0922 0412, 0932 0442, 0472, 0912 0402 0212, 0722, 0742, 0772 0912 0012, 0052, 0092, 0222, 0372, 0382, 0392, 0412, 0932 0442, 0932 0492, 0932 0592, 0602 0992 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932 0002, 0932	SHINTOM SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN SHOGUN STS SUNPAK SYLVANIA SYMPHONIC TANDY TASHIKO TEAC TECHNICS TEKNIKA TELEFUNKEN TMK TOSHIBA TOTEVISION UNITECH VECTOR RESI	0852 0922 0852 0032, 0332, 0352, 0352, 0362, 0672, 0792, 0932 0602 0352 0002, 0492, 0502, 0762, 0992 0992 0712, 0992 0992 0932 0322, 0912, 0932, 0992 0928 0252 0212, 0732, 0772, 0922 0662, 0302, 0342, 0622, 0682, 0712, 0762 0912, 0922 0922 EARCH 0202, 0432, 0632 EPTS 0202, 0432, 0632, 0952 0322, 0402, 0472, 0482, 0602, 0712, 0482, 0602, 0712, 0842, 0652, 0712, 0842, 0652, 0712, 0842, 0652, 0712, 0842, 0652, 0712, 0842, 0652, 0712, 0842, 0652, 0712, 0842, 0652, 0712, 0842, 0852, 0922,	AMAHA LD PLAYE AIWA DENON DISCO VISIOI FUNAI HITACHI (E) KENWOOD MAGNAVOX MARANTZ MITSUBISHI NAD PANASONIC PHILIPS PIONEER RCA REALISTIC SHARP SONY VICTOR YAMAHA CD PLAYE ACOUSTIC RI ADC ADC ADC ADC ADC AIWA	0208 CR 0157 0147 N0017 0157 0017 0057 0017 0027 0027 0027 0137 0077, 0177 0027 0017, 0037, 0137 0167 0157 0127 0047, 0057, 0117 0097 0007, 0067 CR ER ESEARCH 1295 0025, 0065 0205, 0255, 1015 0265 0295, 0945, 1035, 1055	MARANTZ MCINTOSH MCS MEMOREX MGA MISSION MITSUBISHI MTC NAD NAKAMICHI NEC NIKKO ONKYO OPTIMUS PANASONIC PENNY PHILIPS PIONEER PROTON QUASAR RCA REALISTIC REVOX ROTEL	0955 0215, 0235, 0375, 0785, 1345 0355, 1085 0905, 1315 0205, 0225, 0235, 0305, 0325, 1105 0135 0215 0135, 0445 1255 0035, 0615, 0685, 0695 0125, 0435, 0515 0255, 0905, 0965 0545, 1005 0155, 0455, 0495, 0805, 1155 0225, 0245, 0555, 0845, 0895, 0935 0055, 0825, 1095, 1125 0905 0165, 0215 0305, 0935, 1045 0215, 1185 0055 0205, 0915, 1115 0205, 0225, 0235, 0325, 0555, 0845 1175 0205

SAE 0215 OPTIMUS 0034, 0064, 0204, SAMSUNG 1285 0334 SANSUI 0215, 0625, 0975, ONKYO 0364, 0374 1025, 1105 **PHILIPS** 0094 SANYO 0145, 0555, 0635, PIONEER 0034, 0044, 0064 0765 REVOX 0354 SCOTT 0325, 1105 SANSUI 0094, 0344 **SEARS** 0345 SHARP 0264 SHARP 0235, 0665, 0895, SHERWOOD 0334 1065, 1075 SONY 0054, 0084, 0324 SHERWOOD 0194, 0254 0115, 0235, 0395, TEAC 0475 TECHNICS 0074, 0314 SIEMENTS GARRARD WARDS 0034 1245 YAMAHA 0004, 0014, 0104, SIGNATURE 0114, 0164, 0174, 0175 SONTEC 1165 0264 SONY 0065, 0565, 0865, 1145 STARON 1235 STS 0025 SYLVANIA 0215 SYMPHONIC 0335 TANDY 0305 TANGBERG 1195 TEAC 0235, 0335, 0385, 0525, 0795, 0835, 1355 TECHNICS 0055, 0605, 1095 TECHWOOD 1325 TELEFUNKEN (E) 0505 THOMSON (E) 0505 TOSHIBA 0035, 0685 VECTOR RESEARCH 0065, 1135 WARDS 0175 YAMAHA 0005, 0015, 0085, 0415, 0545, 0575, 1065

CD RECORDER

HITACHI 0474 JVC (VICTOR) 0504 MARANTZ 0484, 0494 PHILIPS 0444 PIONEER 0454 YAMAHA 0414

MD RECORDER

KENWOOD 0384 PIONEER 0424 SHARP 0434 SONY 0394 YAMAHA 0024, 0394, 0404,

0514

TAPE DECK

AIWA 0094, 0214, 0224 AKAI 0184 CARVER 0094 DENON 0304 **FISHER** 0144 GARRARD 0194.0204 JVC (VICTOR) 0274, 0284, 0294 KENWOOD 0124, 0134, 0154, 0234, 0244, 0264 MAGNAVOX 0094 MARANTZ 0094, 0344 MITSUBISHI 0184



© 2004 YAMAHA CORPORATION All rights reserved.