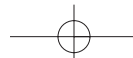


harman/kardon

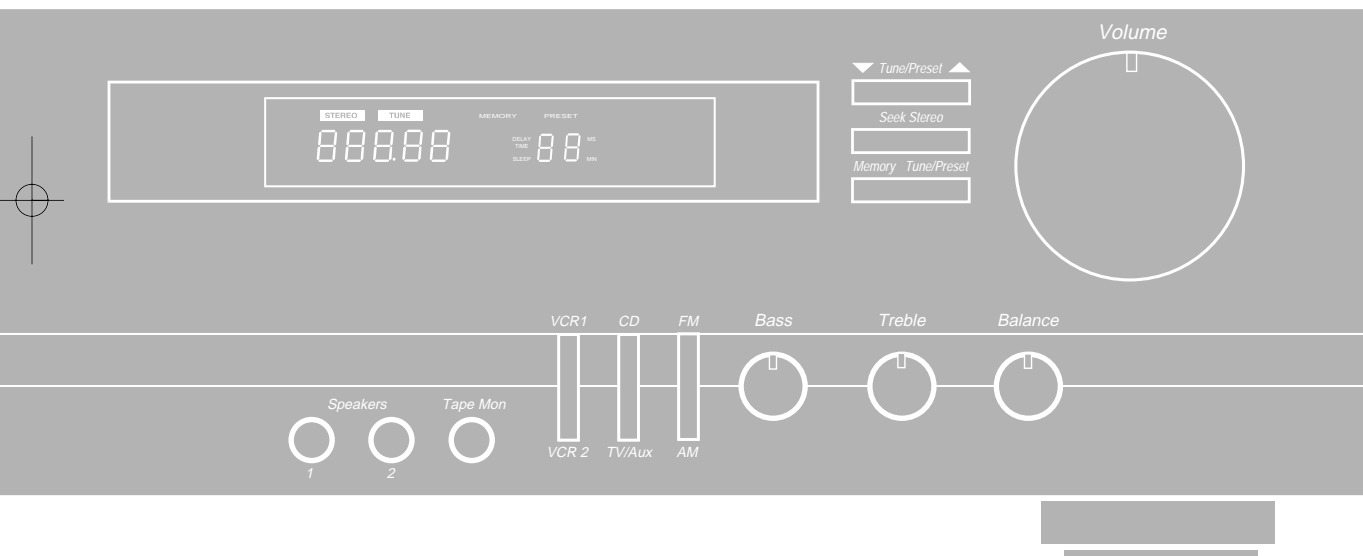


Service and Parts Office:
80 Crossways Park West, Woodbury, New York (800) 422-8027
8500 Balboa Blvd, Northridge CA 91329
A Harman International Company

1111-HK3250-1 Printed in Korea
230 Volt - 11 Language Version
9007018261.



HK3250

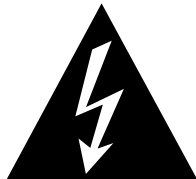


■ **harman/kardon**

Receiver OWNER'S MANUAL
 Receiver BEDIENUNGSANLEITUNG
 Receiver MODE D'EMPLOI
 Receptor MANUAL DEL USUARIO
 Receiver GEBRUIKSAANWIJZING

Receiver MANUAL DE INSTRUÇÕES
 Στερεοφωνικός Ραδιοεπιχυτής ΟΔΗΓΙΕΣ ΧΡΗΣΗΣ
 Receiver BRUKSANVISNING
 Receiver BRUGSANVISNING
 Receiver KÄYTTÖOPAS

ENGLISH



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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



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



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

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

Harman Kardon HK3250

Date of purchase _____

Purchased from _____

Address of business purchased from _____

Installed by _____

Date Installed _____

Serial No. _____

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.

Thank you for choosing a Harman Kardon Audio/Video Receiver.

Your new Unit is an exceptionally well-engineered product that will give you years of superb performance.

Save all packing material.

It is essential for shipping should you move, or in the event the unit ever needs repair.

HANDLE THE POWER CORD GENTLY

- To disconnect the plug from the AC outlet, pull on the plug itself, not on the cord.
- Disconnect the plug from the AC outlet whenever the unit is to be left unused for an extended period of time.
- Do not place furniture or other heavy objects on the cord, and avoid dropping heavy objects on it. Also do not make a knot in the cord.

PLACE THE UNIT ON A FIRM AND LEVEL SURFACE

Avoid installing it:

- In moist or humid places
- Close to heating equipment or in places exposed to direct sunlight
- In a direct draft from an air conditioner or in other very cold locations
- In places subject to excessive vibration or dust
- In poorly ventilated places

MOVING THE UNIT

Before moving the unit, be sure to unplug the power cord from the AC outlet and disconnect all wires to other components.

SERVICE

Call your local distributor for service.

DO NOT OPEN THE CABINET

Do not attempt to service this unit. Tampering with internal components can cause fire or shock, and may void your guarantee. If water or a small object enters the unit, unplug the power cord immediately and consult an authorized Harman Kardon service center. Using the unit under such conditions may cause a fire or shock hazard.

CLEANING

Remove dust by wiping the unit with a soft, dry cloth. If necessary, use a soft cloth lightly dampened with mild soapy water; then wipe with a dry cloth. Never use benzene, thinner, alcohol or other volatile agents, and avoid spraying insecticides near the unit.

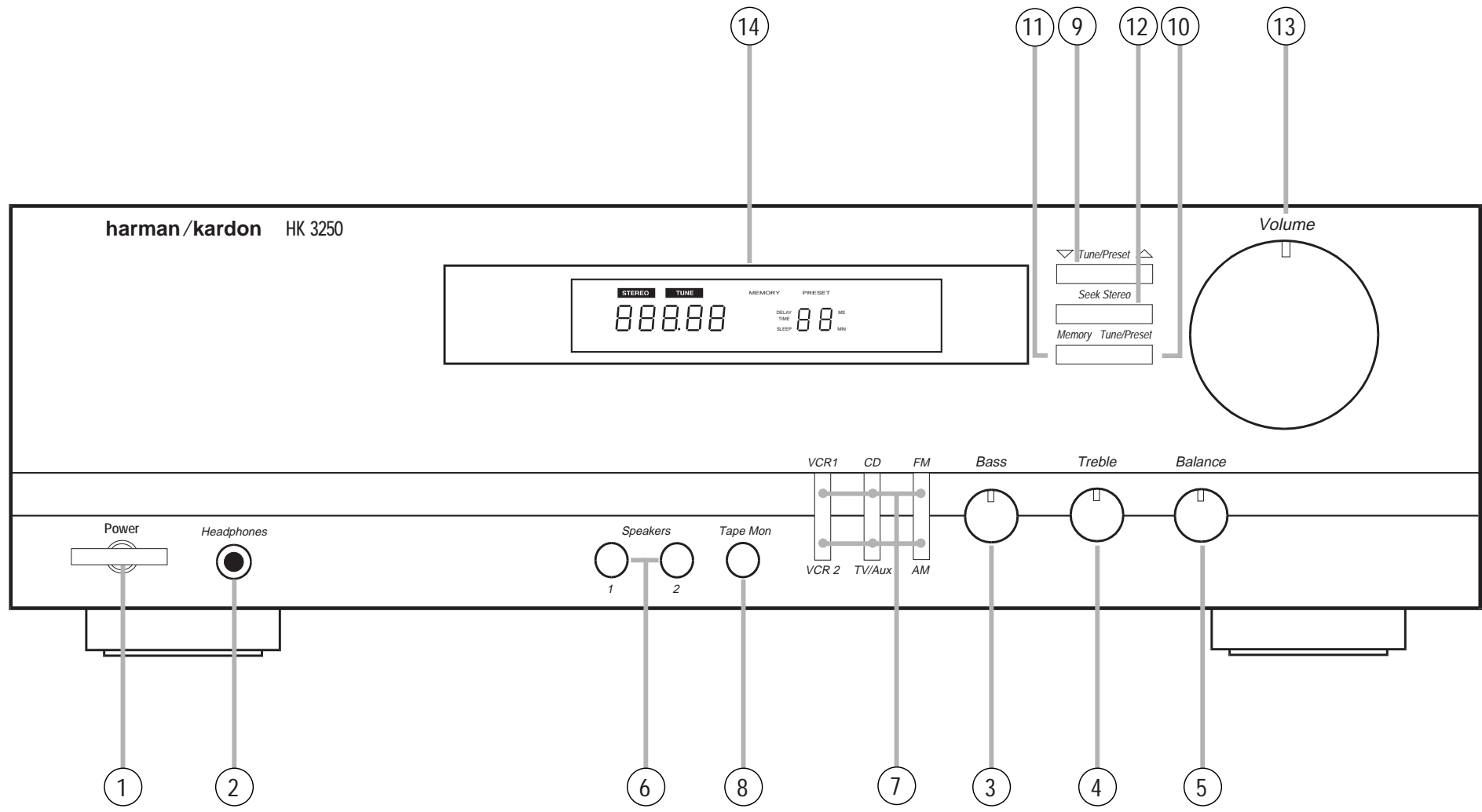
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Front Panel Controls

ENGLISH



Front Panel Controls

1. POWER BUTTON

Press this button to turn the power on. Press again to turn the power off. If you connect the other components to the switched outlet, it can also be used as a system power button.

2. HEADPHONE JACK

Stereo headphones can be plugged into this jack for private listening. Headphone impedance should be between 8 and 2K ohms. Best results between 200 and 400 ohms.

3. BASS CONTROL

Modifies the low-frequency sound of the left and right channels as much as +/- 10dB. Set this control at a suitable position for your taste and room acoustics.

4. TREBLE CONTROL

Modifies the high-frequency sound of the left and right channels as much as +/- 10dB. Set this control at a suitable position for your taste and room acoustics.

5. BALANCE CONTROL

This control is used for balancing the relative sound volume of the left and right channel speakers. Clockwise rotation reduces the volume from the left speaker, counterclockwise rotation reduces the volume from the right speaker.

6. 1 / 2 SPEAKER SWITCHES

These switches allow you to select various combinations of speakers as follows;

- To drive 1 pair of speakers, push only the speaker 1 switch in.
- To drive a second pair of speakers, push only the speaker 2 switch in.
- To drive both pairs of speakers, push both 1 and 2 switches in.
- To use headphones for private listening or monitoring, leave both 1 and 2 switches pushed out

7. INPUT FUNCTION SELECTOR BUTTONS

Press these buttons to select the desired input source.

8. TAPE MONITOR BUTTON

Press this button to select input from a tape deck.

9. TUNE / PRESET BUTTON

When AUTO is not lit, the TUNE/PRESET buttons will allow you to tune to a station manually.

10. TUNE / PRESET SCAN BUTTONS

Press the TUNE/PRESET button to light up PRESET then use the up/down buttons momentarily to scan the preset station frequencies. The receiver stops at each preset location from 1-30 that has been entered in memory. Hold the button down to skip through the presets quickly. In the TUNE mode press these buttons to change selected frequencies.

11. STATION MEMORY BUTTON

Use this button to store an AM or FM frequency. Press this button and select one of 30 preset locations to store the frequency with the TUNE/PRESET buttons while the MEM indicator blinks, press MEMORY

again to store preset station.

NOTE: When you store a frequency in a memory location that already contains a frequency, you replace the previous frequency. If your receiver is disconnected from AC power for more than about 2 weeks, it loses all stored frequencies.

12. SEEK STEREO BUTTON

Press this button, "Auto" will illuminate in the display. Then press the TUNE/PRESET button. The tuner will automatically seek out stations in your area that have enough signal strength to be listenable. The tuner will stop on stations until the SEEK/STEREO button is pressed again.

13. VOLUME CONTROL

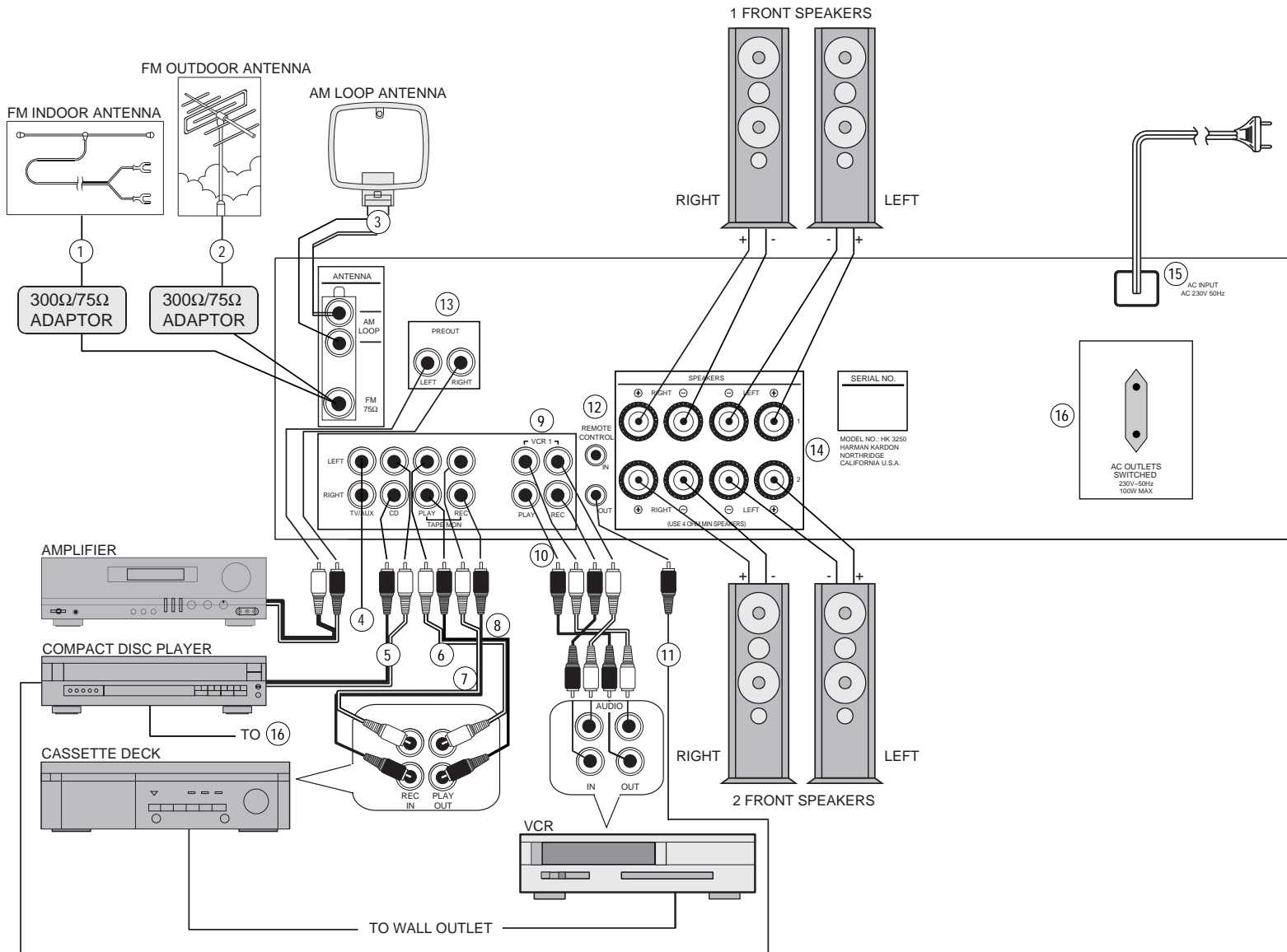
Turn the VOLUME clockwise to increase the volume and counterclockwise to decrease it.

14. DISPLAY WINDOW

This window shows the state of operation for easier control of the receiver. It also contains the IR Remote Sensor.

Rear Panel Connections

ENGLISH



Rear Panel Connections

1. FM INDOOR ANTENNA

Connect the supplied antenna (the wire lead) to a 300Ω/75Ω adapter and connect the adapter to the 75Ω FM antenna terminal, as shown in the Rear Panel Connection Diagram. Change the position of the antenna until you get the best reception of your favorite stations.

2. FM OUTDOOR ANTENNA

An outdoor FM antenna may be used to further improve the quality of reception. Disconnect the indoor antenna before replacing it with the outdoor one. A 75Ω/300Ω adaptor must be used.

3. AM LOOP ANTENNA

Tune in your favorite AM station and position the loop antenna for best reception. Try other stations and find the position that gives the best overall

reception. When this unit is mounted in a rack or placed on a shelf with sufficient space behind, hang the antenna on a wall in the direction which gives the best reception.

NOTE: If noise is heard during AM reception, move the antenna for better reception. To prevent undesired noise, the AM LOOP ANTENNA should be located away from the remote control cord over 12 inches (30cm).

4. TV / AUX INPUT JACKS

This input is provided for any source you want to hear. An additional compact disc player, tape recorder, TV video cassette recorder (VCR), etc. can be plugged into these jacks.

5. CD INPUT JACKS

Connect the output cables of a compact disc player to these jacks.

6. TAPE PLAY JACKS

Connect the line output of your CASSETTE DECK to these jacks.

7. TAPE REC JACKS

Connect the line input of your CASSETTE DECK to these jacks.

8. VCR2 INPUT JACKS

Connect these jacks to the corresponding AUDIO OUTPUT jacks of your TV (if available) or VCR.

9. VCR1 INPUT (PLAY) JACKS

Connect these jacks to the corresponding AUDIO OUTPUT jacks of a VCR.

10. VCR1 OUTPUT (REC) JACKS

Connect these jacks to the corresponding AUDIO INPUT jacks of a VCR.

11. REMOTE CONTROL OUT JACK

Connect this jack to the REMOTE IN jack on a Harman Kardon component. Use one of the accessory mini-plug cables.

You can control many other Harman Kardon components in your system using the HK3250 remote commander.

12. REMOTE CONTROL IN JACK

Connect a Harman Kardon HE 1000 remote I.R. sensor to this jack. You can operate the unit by remote commander through the adaptor. It is convenient when the unit is located in a separate room.

13. PRE OUT JACKS

When a separate power amplifier is used to drive the speakers, connect the power amplifier input to these jacks.

14. SPEAKER TERMINALS

Two pair of speaker terminals are provided. For primary speakers connect the left (L) and right (R) speakers to the speaker 1 terminals. Make sure that the positive (+) and negative (-) terminals on the speaker are connected to the corresponding terminals on the receiver. If you wish to use another pair of speakers with the receiver, connect this pair to the speaker 2 terminals.

15. AC INPUT CORD

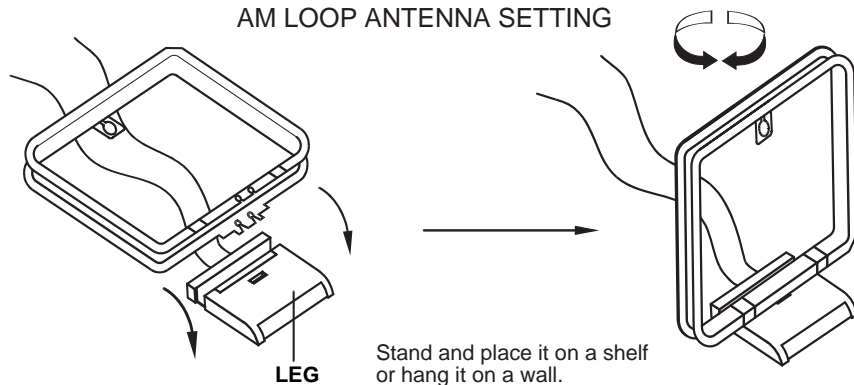
Plug this cord in AC outlet on a wall.

16. AC SWITCHED OUTLET

This outlet provides AC power. The AC power is switched by the power button. Use this outlet for a CD player or a cassette deck.

PLEASE NOTE: Do not plug irons or toasters or other products with high power consumption into these outlets.

AM LOOP ANTENNA SETTING



Operation

BASIC OPERATION

- 1 Press the POWER button to turn the power ON, the display panel will then light up.
 - When using the POWER button on the remote control turn the unit off, the unit will go into STANDBY mode.
- 2 Select the desired program source with the INPUT FUNCTION SELECTOR buttons and the selected input function appears in the display.
- 3 When the TAPE MONITOR button is set to ON so that the TAPE indicator lights up, the selected program source cannot be heard from the speakers.

To listen to a program source other than cassette deck be sure to set the TAPE MONITOR button to OFF.

- 4 Adjust the volume to a comfortable listening level with the VOLUME control or VOLUME UP/DOWN buttons on the remote control.
- 5 For private listening, insert a 1/4 inch plug of the headphone into the HEADPHONE jack.
 - When the headphones are plugged, sound from the speakers is cut off.

LISTENING TO BROADCASTS

You can use auto, manual or preset tuning to select a radio station.

AUTO TUNING

If broadcast signals are strong and there is no interference, auto tuning is possible.

- 1 Press the FM or AM button to select the desired band.
- 2 Press the SEEK STEREO button and AUTO will illuminate in the display.
- 3 Press the TUNE UP/DOWN button. Tuning will start automatically and stop at a broadcast station frequency with sufficient signal strength.

MANUAL TUNING

Auto tuning may be impossible if the broadcast signal is weak. If so, use manual tuning.

- 1 Press the FM or AM button to select the desired band.
- 2 Press the SEEK/STEREO button and AUTO will go out in the display.
- 3 Press the UP or DOWN TUNE/PRESET button until the desired station frequency is reached.
 - Each time the button is pressed, the frequency changes by a step.
 - When the button is kept pressed, the frequency changes continuously in sequence.

PRESET TUNING

The receiver has a memory for up to 30 preset stations.

If the station frequencies are stored in this memory, they can be tuned in by a simplified procedure.

MANUAL PRESETTING

Up to 30 stations can be preset at random, regardless of the reception band.

- 1 Tune in the station to be memorized using the auto or manual tuning.
- 2 Press the MEMORY button, then the MEMORY indicator lights up for 5 seconds.
- 3 Select the channel number with the UP or DOWN TUNE/PRESET NUMERIC buttons on the remote while the MEMORY indicator is lit, then the selected channel number lights up.
- 4 Press the MEMORY button to memorize the station.
 - When using the NUMERIC buttons on the remote, the station is memorized without pressing the MEMORY button again.
 - When selecting one digit channel number with the NUMERIC buttons, press the corresponding number without "0".
- 5 Repeat steps 1 to 4 to preset other stations.



RECALLING THE PRESET STATIONS

Select the channel number of the desired preset station with the UP or DOWN TUNE/PRESET or NUMERIC buttons on the remote control unit.

SCANNING THE PRESET STATIONS IN SEQUENCE

- 1 Press the PRESET SCAN button on the remote control unit to listen to the preset stations.
- 2 The receiver will start scanning the stations in the preset sequence and each station is received for 4 seconds.
- 3 At the desired station, press again to stop scanning.

NOTES:

- If the end of the frequency range is reached during the auto or manual tuning, tuning will continue from the opposite end.
- When FM stereo broadcasts are poor, select the FM mono mode with the SEEK/STEREO button so that the AUTO indicator goes out.
- When memorizing a new station, the previously memorized station on the same channel number is cleared.
- In the event of a power failure or when the receiver is disconnected from the AC outlet, the memorized stations are maintained for approximately 2 weeks.

RECORDING WITH A CASSETTE DECK

- 1 Select the program source to be recorded with the INPUT FUNCTION SELECTOR buttons.
- 2 Start recording on the cassette deck.
- 3 Play back the desired program source.
 - The volume, balance, bass and treble settings have no effect on the recording or dubbing.
 - When recording is performed on a 3-head cassette deck, the recorded sound can be monitored through the speakers by pressing the TAPE MONITOR button to ON.

1. INFRARED TRANSMITTER WINDOW

The infrared beam is emitted forward from this window when you press any button on the commander. For the remote controls to function properly, always face this window toward the remote sensor window on the receiver and do not obstruct this window with any material.

2. STANDBY BUTTON

Press this button to turn the power on and off.

Automatic power on: When you press the input function buttons (CD, TUNER, TAPE, TV/AUX, VCR 1, VCR 2) in STANDBY mode, the power is automatically turned on and the function is selected.

3. TUNING UP/DOWN

Press these buttons to tune the receiver up or down.

4. PRESET SCAN BUTTON

Button for scanning preset station frequencies.

5. NUMERIC BUTTONS

These buttons can be used for preset tuning in TUNER mode.

Preset tuning: Select one of 30 preset locations.

6. CD FUNCTION BUTTONS

For a CD PLAYER: DISC (DISC SELECTOR is available for the Harman Kardon FL8400, FL8450 CD changer), PLAY, PAUSE, STOP, BACKWARD SKIP, FORWARD SKIP, A-B and INTRO buttons are available.

When selecting a disc, press the DISC button.

7. INPUT FUNCTION SELECTOR

Press the button to select the desired input function. The available buttons are CD, TUNER, TAPE MON, TV / AUX, VCR 1, and VCR 2.

8. CASSETTE DECK FUNCTION BUTTONS

For a cassette deck: PAUSE/RECORD, STOP, REVERSE PLAY, FORWARD PLAY, REWIND, FAST FORWARD buttons are available.

9. VOLUME BUTTONS

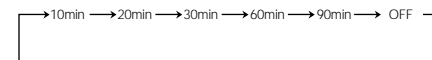
Press to adjust volume levels.

10. DISPLAY BUTTON

Press once and the display dims, press again and it turns off. Press a third time and it goes on.

11. SLEEP BUTTON

Set the receiver to automatically turn off after 10, 20, 30, 60, or 90 minutes. Each time the button is pressed, the setting is advanced as below.



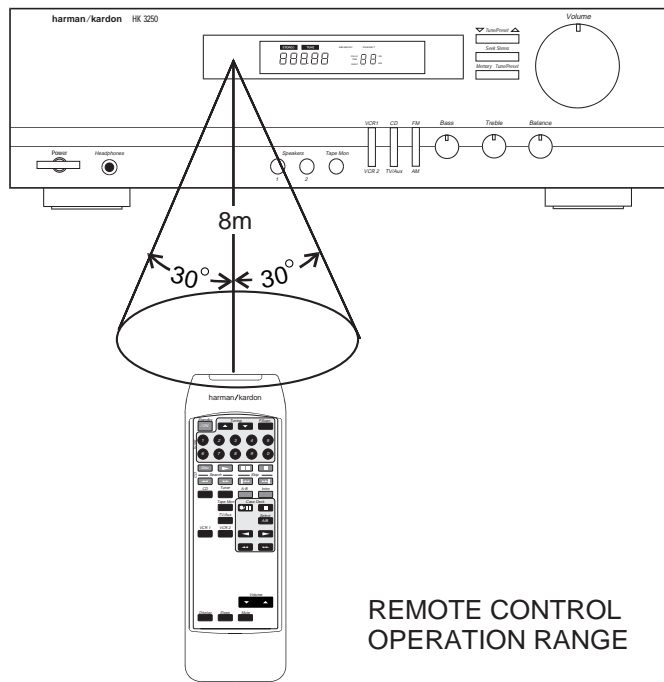
The display will dim when the sleep function has been set.

12. MUTE BUTTON

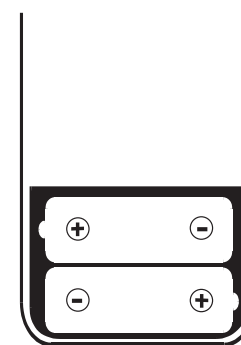
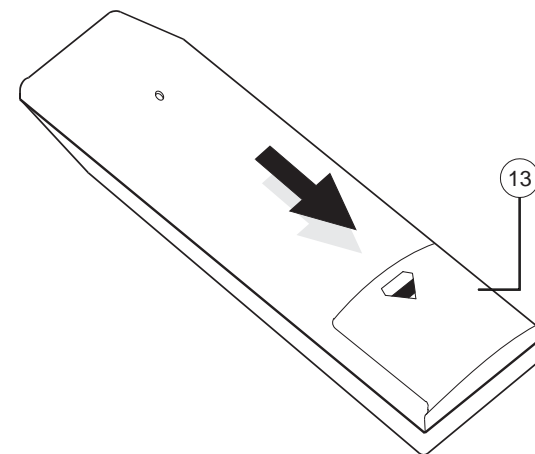
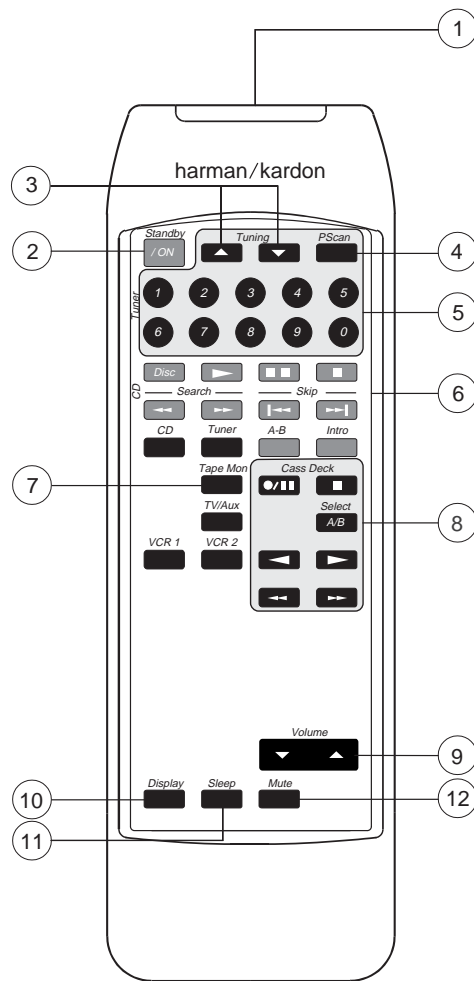
Press this button to silence the speakers temporarily. The volume indicator blinks. Press again to restore the same listening level as before.

13. BATTERY COMPARTMENT

This battery case is provided as the power source for the commander. To remove the cover, press it down with your thumb and pull it toward the back side. Two UM-3, size "AA" or R6 1.5V dry batteries are used. When loading the batteries, make sure that the polarity is correct. Remove the batteries from the case if the remote commander will not be used for a long time.



REMOTE CONTROL OPERATION RANGE



ENGLISH

Troubleshooting

ENGLISH

This unit is designed for trouble-free operation. Most problems users encounter are due to operating errors. So, if you have a problem, first check this list for a possible solution. If the problem persists, consult your authorized Harman Kardon Service Center.

IF THE PROBLEM IS...

No lights illuminate when POWER button is pressed

No sound is heard

No output from one or more channels

Tuner sound has a large amount of interference, or
The "Stereo" display is not illuminated, or
Tuner sound distorts and/or volume level is too low

Tuner is intermittent or continuously buzzing or hissing

Stations cannot be preset

MAKE SURE THAT THE...

Unit is plugged into a live outlet

Correct input function selector button has been pressed

Volume is turned up

Speakers are connected properly

Cables are not defective: Check/replace speaker cables

The signal source is operating and providing proper signal output to the HK3250

The antenna is properly connected

The antenna is properly located

The antenna is set in the proper direction

The antenna is adequate to receive the desired station

The unit is away from fluorescent lights, TVs, motors and other electrical appliances

After pressing the MEMORY button, the PRESET button is pressed while the MEMORY indicator blinks, and the memory button is pressed again.

Specifications

Continuous Average Power (FTC)
 40 Watts from 20Hz-20kHz: @<0.09% THD, both channels driven into 8 Ohms
 65 Watts from 20Hz-20kHz: @<0.09% THD, both channels driven into 4 Ohms

AMPLIFIER SECTION

High-Instantaneous Current Capability (HCC): ±20 Amps
 Negative Feedback: 20dB
 Frequency Response @1W (+0/-3dB): 0.5Hz - 100kHz
 Rise Time: 1.8µSec
 Transient Intermodulation Distortion (TIM): Unmeasurable

PREAMPLIFIER SECTION

Signal-to-Noise Ratio (ref. 1 Volt, A-Wtd)
 CD: 92dB
 Video: 83dB
 Input Sensitivity/Impedance
 Video, CD, Tape: 150mV/22kΩ
 Tone Control Range
 Bass @ 50Hz: ±10dB
 Treble @ 10kHz: ±10dB

TUNER SECTION: FM

Usable Sensitivity, Mono (dBf): 11.2

50dB Quieting Sensitivity, Stereo (dbf): 40.3
 Signal-to-Noise Ratio @ 65dBf, mono/stereo: 70dB/65dB
 Capture Ratio: 2.0dB
 Selectivity, Adjacent/Alternate Channel: 5dB/65dB
 IF Rejection: 90dB
 AM Rejection @ 45dBf: 55dB
 Stereo Separation @ 1kHz, 65dBf: 45dB
 THD @ 1kHz, 65dBf, mono/stereo (%): 0.3/0.5

TUNER SECTION: AM

Sensitivity, External Antenna: 25µV
 Alternate Channel Selectivity: 38dB
 Image Rejection: 35dB
 IF Rejection: 50dB

DIMENSIONS (W×H×D):

inches: 17⁵/₁₆ × 4⁷/₈ × 14¹⁵/₁₆
 mm: 440 × 125 × 380
 Weight (lbs/kgs): 18 lbs, 8.2 kg
 Depth measurement includes knobs, buttons and antennas.
 Height measurement includes feet.
 All features and specifications are subject to change without notice.

DECLARATION OF CONFORMITY



We, Harman Marketing Europe a/s

Kongevejen 194B
 DK-3460 Birkerød
 DANEMARK

declare that the product described in this owner's manual is in compliance with technical standards:

EN 55013/6. 1990, EN55020/6. 1988, EN 60555 Part 2 and 3/4. 1987

Accredited test laboratory:

MIKES PRODUCT SERVICE GmbH
 Ohmstrasse 2-4
 D-94342 Strasskirchen
 GERMANY, 27.09.1995

Steen Michaelsen

Harman Marketing Europe a/s

The appliance conforms with EEC directive 87/308/EEC regarding interference suppression

ENGLISH