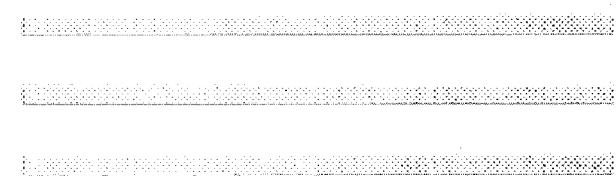
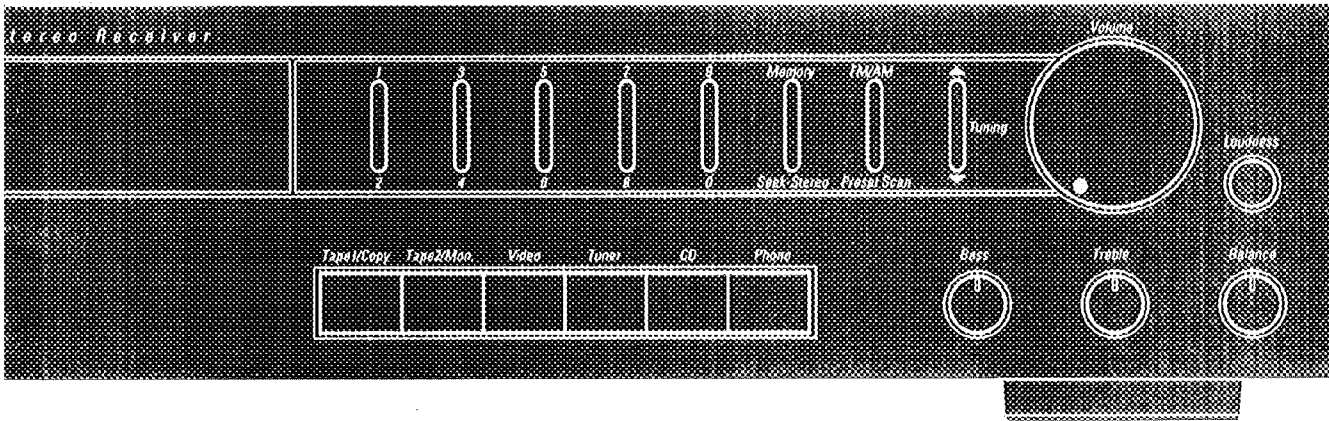


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

HK3550/HK3450/HK3350



harman/kardon

Stereo Receiver

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For Customers in the UK

Your unit is supplied with the flex which will have either two or three wires, so the following items should be observed to guarantee safety:

THREE CORE FLEX

WARNING: THIS APPARATUS MUST BE EARTHED.


IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow : Earth

Blue : Neutral

Brown : Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

TWO CORE FLEX

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

Blue : Neutral

Brown : Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

HK3550/HK3450/HK3350 OWNER'S MANUAL

Congratulations on your choice of the Harman Kardon HK3550/HK3450/HK3350 Stereo Receiver.

In order to obtain the best performance from this receiver, please be sure to read this owner's manual and use the HK3550/HK3450/HK3350 only in accordance with its instructions.

The special features of this unit include:

HCC (High Instantaneous Current Capability)

The HK3550/HK3450/HK3350 amplifier sections react rapidly to musical transients, providing the instantaneous current necessary to precisely drive and control nearly any loudspeaker system.

Ultrawide Bandwidth

The bandwidth of this unit is exceptionally wide and is independent of negative feedback. This improves transient accuracy and phase linearity.

Low Negative Feedback

This unit has been designed to have low distortion and wide bandwidth without high negative feedback. This further improves its dynamic accuracy.

Discrete Component Circuitry

In order to achieve the above goals, all discrete electronic circuitry has been employed. No available integrated circuits could provide this high level of performance.

Sophisticated Electronic Protection Circuitry

Harman Kardon's unique protection circuitry guards the amplifier from short-circuited or damaged speakers and wires, without impairing sound quality by the use of current limiting or output relays.

GENERAL INSTRUCTIONS

Use the Correct AC Voltage

Connecting the unit to an outlet supplying a higher voltage may create a fire hazard.

Handle the Power Cord Gently

Do not disconnect the plug from the AC outlet by pulling the cord; always pull the plug itself. Pulling the cord may damage it.

If you do not intend to use your unit for any considerable length of time, disconnect the plug from the AC outlet. Do not place furniture or other heavy objects on the cord, and try to avoid dropping heavy objects upon it. Also do not make a knot in the power cord. Not only may the cord be damaged, it can also cause a short circuit with a consequent fire hazard.

Place of Installation

Place the unit on a firm and level surface. Avoid installing your unit under the following conditions:

- Moist or humid places.
- Places exposed to direct sunlight or close to heating equipment.
- Extremely cold locations.
- Places subject to excessive vibration or dust.
- Poorly ventilated places.

Do not obstruct the ventilation slots on the top surface of the unit by placing objects over them.

Otherwise, the temperature inside the unit may rise, possibly affecting its long-term reliability.

In Case of Moving the Unit

Before moving the unit, be sure to pull out the power cord from the AC outlet and disconnect the interconnection cords with other units.

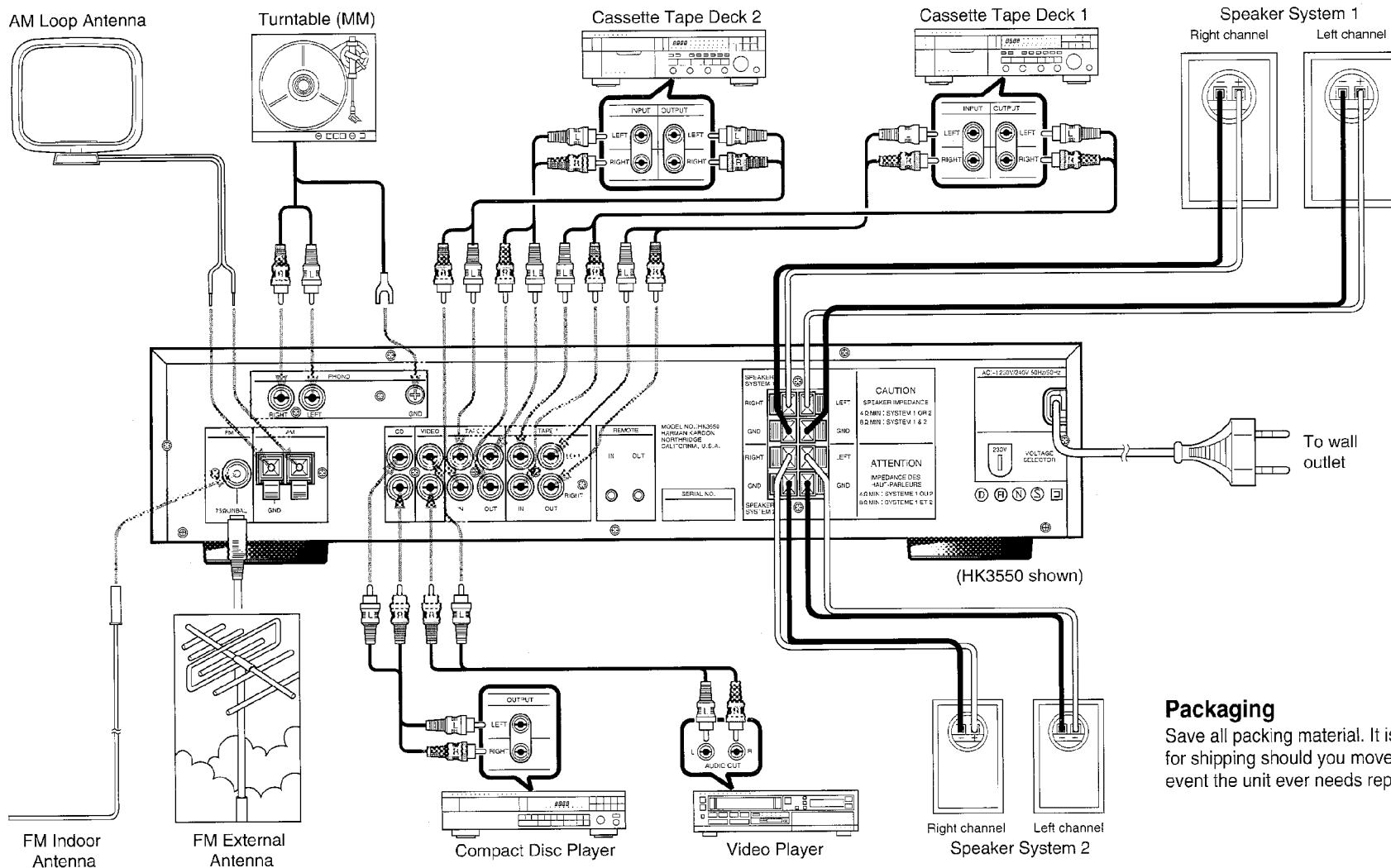
Do Not Open the Cabinet

To prevent shock hazard, do not tamper with internal components for inspection or maintenance. Harman Kardon does not guarantee against performance degradation resulting from any modification. If water, a hairpin or wire accidentally enters the unit, immediately extract the plug from the AC outlet to prevent shock and consult an authorized Harman Kardon service station. If you use the unit under this condition, it may cause a fire or shock hazard.

Cleaning

If the unit gets dirty, wipe it with a soft dry cloth. If necessary, wipe it with a soft cloth dampened with mild soapy water and then with a dry cloth. Never use benzene, thinner, alcohol or other volatile agent, and avoid spraying an insecticide near the unit.

CONNECTIONS



Packaging
Save all packing material. It is essential for shipping should you move, or in the event the unit ever needs repair.

Connecting Antennas

Choosing an FM antenna.

Select the antenna that best meets your needs:

1. An indoor antenna is supplied with your receiver. This will work well if you are located in a strong signal area.
2. Other indoor antennas are available which may improve reception by offering greater positioning flexibility.
3. If reception is unsatisfactory using indoor antennas, an outdoor antenna should be installed.
4. Alternatively, you may connect to an FM cable antenna, if available.

Connecting an AM Antenna.

Your receiver comes with an AM loop antenna which provides good reception in most locations. For best results, place this antenna away from the unit and away from contact with any metal object. In areas where AM signals are weak, an outdoor AM antenna may improve sound quality.

Connecting Other Components

1. Make sure receiver and other components are turned off.
2. Connect each component's Output jacks to the corresponding Input jacks on the back of your receiver. Use the white, black or gray plugs to connect Left channel jacks; use the red plugs for Right jacks.

Wired Remote Control

To control your receiver with an external infrared remote sensor, connect the wire from the remote sensor to the REMOTE IN jack on the back panel. Or, if another stereo component has a built-in infrared remote sensor and a Remote Output jack, it may be possible to connect this jack to the REMOTE IN jack of your receiver. All Harman Kardon products with "Remote In" and "Remote Out" jacks are compatible with one another, except for the Citation 22, 24 and 25. Other manufacturers' remote sensors and components may not be compatible, but it will not hurt to experiment.

A second wire may be used to connect your receiver's REMOTE OUT jack to the Remote Input of another stereo component. Continue this process to include additional components (if compatible).

Connecting Speakers

1. For best performance, use high quality speaker cables. However, ordinary copper wire can be used if the gauge meets the following requirements:

Wire Length	Gauge
Up to 2.5 meter	18 AWG
Up to 4 meter	16 AWG
Up to 6 meter	14 AWG
Over 6 meter	10-12 AWG custom speaker cable

2. Avoid coiling excess wire with or near line level hook-up cords.

IMPORTANT: When connecting two pairs of speakers, determine the impedance of each pair by looking on the back of the speakers, or in your owner's manual, or by contacting your dealer or manufacturer. Then refer to the following chart to see if both sets may be played simultaneously.

If impedance of the two pairs is:	Can both pairs be played simultaneously?
8Ω/8Ω	YES
8Ω/6Ω	NO
8Ω/4Ω	NO
6Ω/6Ω	NO
6Ω/4Ω	NO
4Ω/4Ω	NO

WARNING: Do not play both sets of speakers simultaneously except as recommended above. Receiver may overheat.

AC Power

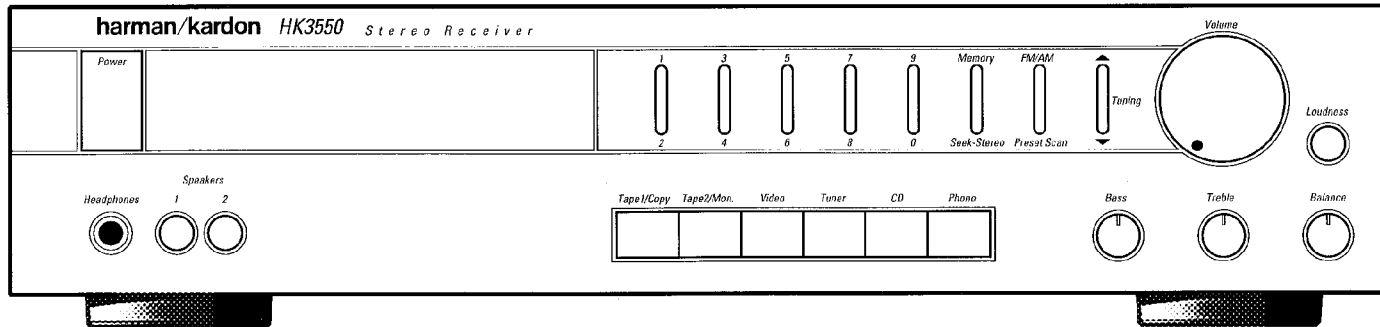
Plug the cord into a wall socket.

NOTE: The power does not shut off completely by just turning the power off. So power cord should be removed from AC outlet when not in use for a prolonged time.

AC Voltage Selector

This receiver is supplied with a voltage selector enabling selection between 230V and 240V on the rear panel. If the selector is not set to the local voltage, set the selector to the correct voltage with a screwdriver before connecting the power cord to a mains outlet.

CONTROLS and FUNCTIONS



(HK3550 shown)

Power Switch

Press to turn the unit on and off.

Headphone Jack

Plug in headphones if desired. (With both Speakers 1 and 2 switches in Off position, output is supplied only to headphones.)

Speakers Switches

Push in to select either of two sets of speakers, or both, or neither (headphone output only).

Function Selector Buttons

Select desired input source by pressing the corresponding button.

Preset Buttons (1 – 0)

Press to access 30 pre-selected stations.

Memory Switch

Press to set a new preset station in memory.

Seek-Stereo Switch

Press to select Seek tuning in stereo, or manual tuning in mono.

FM/AM Selector Buttons

Press to select FM or AM reception.

Preset Scan Button

Press to continuously scan each of the 30 preset stations for 10 seconds.

Tuning Button

Press ▲ to tune to stations with higher frequencies; press ▼ for lower frequencies.

Bass Control

Turn to increase or decrease the proportion of low frequency sound.

Treble Control

Turn to increase or decrease the proportion of high frequency sound.

Balance Control

Turn to adjust relative output level of left and right speakers.

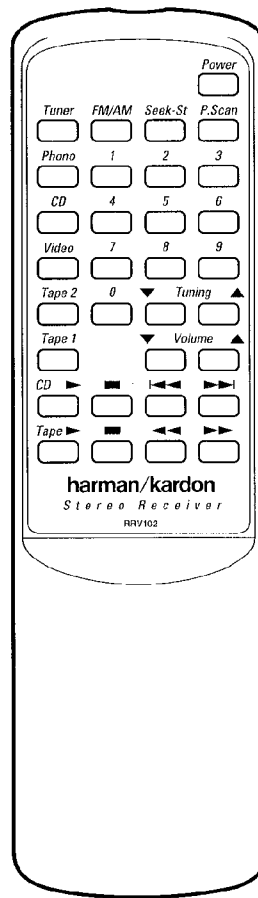
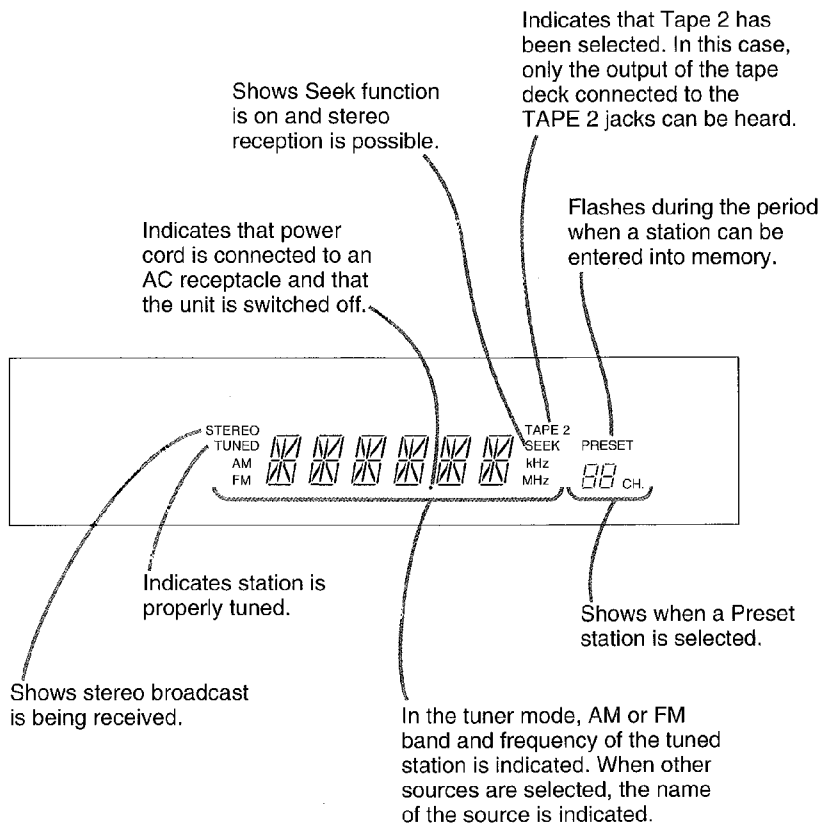
Volume Control

Turn to raise or lower output volume.

Loudness Switch

Press to improve sound quality when listening to your system at low volume.

DISPLAYS and REMOTE CONTROL



Independent Remote Control

The keys on the remote control unit function the same as the corresponding buttons on the receiver itself.

Operating Conditions

The control unit operates effectively within a distance of 7 meters and an angle of 30° from the receiver. Using the control near fluorescent lights may shorten this range, as will any dust or dirt that accumulates on the front of the remote control, or the remote sensor area of the receiver. Also avoid blocking the line of sight between receiver and remote.

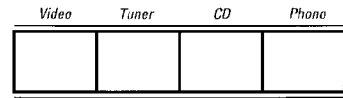
The control unit is powered by two AA batteries, included with your receiver. When you replace weak batteries, replace both at the same time. When the remote is to be unused for an extended period, remove the batteries to prevent damage from corrosion.

(HK3550/HK3450's remote control shown)

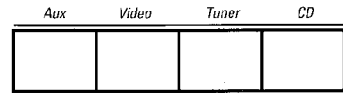
OPERATING INSTRUCTIONS

Listening to your turntable (phono), CD player, tape deck, or other component sound source

1. Turn Volume control to minimum level and press the Power switch to turn on the receiver.
2. Set the Speakers switches to play speakers 1, 2, both or neither (for headphone use).
3. Press the Function selector button corresponding to the component you wish to hear.
4. Begin playing the desired components.
5. Adjust the Volume control to the desired level.
6. When listening at low volume, you may wish to press in the Loudness switch. This boosts low frequencies to improve the apparent balance of low to mid and high frequencies.
7. Adjust Bass, Treble and Balance controls as desired.
8. To turn off the Tape 1 selection, press either Video, Tuner, CD, Phono or Aux button.



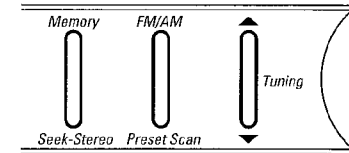
(HK3550/HK3450 Function Selector buttons)



(HK3350 Function Selector buttons)

Listening to AM/FM broadcasts

1. Turn Volume control to minimum level and press the Power switch to turn on the receiver.
2. Set the Speakers switches to play speakers 1, 2, both or neither (for headphone use).
3. Press the Function selector button marked "Tuner".
4. Select AM or FM by pressing the FM/AM selector.
5. Use the ▲ and ▼ Tuning buttons to tune to desired frequency. Or use the station Preset buttons as described below.
6. When tuning FM station:
 - Begin with the Seek-Stereo switch on. ("SEEK" will light on the display panel.) In this mode, pressing ▲ (or ▼) will tune your unit to the next higher (or lower) strong station.
 - To tune to stations too weak to be received in Seek-Stereo mode, turn Seek-Stereo switch off. Then use the ▲ and ▼ buttons to reach the desired frequency.



- NOTE: With Seek-Stereo off, all broadcasts are received in mono. (This eliminates the excessive noise that results when weak stations are received in stereo.) When you tune to a new, stronger station, be sure to turn Seek-Stereo back on.
7. Adjust the Volume control to the desired level.
 8. When listening at low volume, press in the Loudness switch. This boosts low frequencies to improve sound quality.
 9. Adjust Bass, Treble and Balance controls as desired.

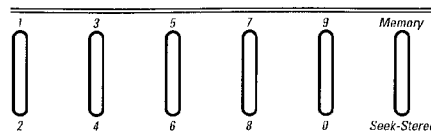
Using the Preset Buttons

Your receiver allows you to store 30 station settings and quickly access them, using the 10 Preset buttons. The preset stations are designated by the number from 1 to 30. Any designation may be used for any AM or FM station, in whatever combination you choose.

To enter a station in memory:

1. Tune to the desired station.
2. Be sure the Seek-Stereo setting is the one desired*.
3. Press the Memory switch. ("PRESET" will flash for about 3 seconds.)
4. With "PRESET" flashing, press the desired numbered Preset button. If a preset of "10" or greater is to be entered, enter the 1, 2 or 3 for 10, 20 or 30 first, then within 3 seconds enter the last digit (0 - 9).

*NOTE: When a station is set in memory, the Seek-Stereo setting is also entered. Subsequently, each time a station is recalled using a Preset button, the tuner automatically switches to the original Seek-Stereo setting for that station.



To change a preset station:

Simply enter the new station. The old station is automatically erased.

To access a preset station:

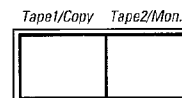
Press the desired numbered Preset buttons.

NOTE: Preset stations are stored indefinitely while the unit is connected to a live AC source, and for approximately 3 weeks when the unit is unplugged.

Making a Recording

When you select Video, Tuner, CD, Phono or Aux as your sound source, recordings may be made on tape deck 1 or 2, or both simultaneously. When making recordings on tape decks 1 and 2 simultaneously, you may listen directly to the source, or you may monitor tape deck 2. DO NOT monitor tape deck 1 during this procedure.

If you wish to copy a tape, place it in deck 1, and press the Tape 1 button on your receiver. You may then record the tape using tape deck 2.



NOTE 1: To turn off the Tape 1 selection, press either Video, Tuner, CD, Phono or Aux. To turn off the Tape 2, press Tape 2 again.

NOTE 2: To use a 3-head tape deck that allows monitoring of the actual recording while it is in process, you must connect it to TAPE 2 jacks. Pressing Tape 1 will switch off the source.

TROUBLESHOOTING

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:

Make sure that:

No lights illuminate when Power switch is pressed.

- The unit is plugged into a live outlet.

No sound is heard.

- Press the Speakers switches corresponding to the desired speakers.
- Correct function button has been pressed.
- Volume is turned up.
- Speaker wires are connected properly.
- Hook-up wires to source component are connected properly.

Tuner sound has a large amount of interference.
OR

The "STEREO" display is not fully illuminated.
OR

Tuner sound distorts and/or volume level is too low.

- 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.

Intermittent or continuous buzzing or hissing.

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

Stations cannot be preset.

- After pressing Memory switch, the preset button is set while the "PRESET" light is still flashing.

Cannot monitor a recording using Tape 1.

- This is not possible. Use Tape 2.

Phono sound is too faint, has hum, ringing, or "howl."

- Turntable cartridge is moving magnet type, or step-up transformer is used.
- Ground wire from turntable has been connected to ground terminal on receiver.
- Cable from turntable is away from power cords and speaker cables.
- Turntable is away from speakers.
- Turntable is on stable surface.

Note: HK3350 should not be used with a turntable.

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

SPECIFICATIONS

Amplifier Section		HK3550	HK3450	HK3350
Continuous Average Power Per Channel (FTC) 20Hz - 20kHz, Both Channels Driven	8 Ohms:	40 Watts @ <0.09%THD	30 Watts @ <0.09% THD	30 Watts @ <0.09% THD
	4 Ohms:	50 Watts @ <0.3%THD	35 Watts @ <0.3% THD	35 Watts @ <0.3% THD
Dynamic Power (IHF, 1kHz tone burst)	8 Ohms:	65 Watts	40 Watts	40 Watts
	4 Ohms:	85 Watts	55 Watts	55 Watts
	2 Ohms:	110 Watts	75 Watts	75 Watts
High Instantaneous Current Capability (HCC):		±35 Amps	±25 Amps	±25 Amps
Negative Feedback:		26dB	26dB	26dB
Power Bandwidth @ half-rated output, 8Ω:		<10Hz - 100kHz	<10Hz - 100kHz	<10Hz - 100kHz
Frequency Response @ 1W (+0/-3dB):		0.5Hz - 150kHz	0.5Hz - 150kHz	0.5Hz - 150kHz
Slew Rate*:		100V/μsec	80V/μsec	80V/μsec
Rise Time:		1.8μsec	1.8μsec	1.8μsec
Transient Intermodulation Distortion (TIM):		Unmeasurable	Unmeasurable	Unmeasurable
Damping Factor:		45	45	45
Signal-to-Noise Ratio (reference rated power output, A-Wtd.)	Phono (MM):	78dB	78dB	-
	Video/CD:	98dB	98dB	98dB
Input Sensitivity/Impedance	Phono (MM):	2.2mV/47kΩ, 125pf	2.2mV/47kΩ, 125pf	-
	Video/CD/Tape:	135mV/22kΩ	135mV/22kΩ	135mV/22kΩ
Phono-Overload:		120mV	120mV	-
RIAA EQ Accuracy 20Hz - 20kHz:		±0.5dB	+0.5dB	-
Tone Control Range, Bass @ 50Hz/Treble @ 10kHz:		±10dB/±10dB	±10dB/±10dB	±10dB/±10dB
Loudness Contour @ -40dB, 50Hz/10kHz:		+10dB/-	+10dB/-	+10dB/-
Tuner Section: FM				
Usable Sensitivity Mono:		13.2dBf	13.2dBf	13.2dBf
50dB Quieting Sensitivity, stereo:		46dBf	46dBf	46dBf
Signal-to-Noise Ratio @ 65dBf, mono/stereo:		70dB/63dB	70dB/63dB	70dB/63dB
Capture Ratio:		1dB	1dB	1dB
Selectivity, Adjacent/Alternate Channel:		10dB/70dB	10dB/70dB	10dB/70dB
IF Rejection:		100dB	100dB	100dB
AM Rejection @ 45dBf:		55dB	55dB	55dB
Stereo Separation @ 1kHz, 65dBf:		45dB	45dB	45dB
THD @ 1kHz, 65dBf; mono/stereo:		0.15%/0.2%	0.15%/0.2%	0.15%/0.2%
Tuner Section: AM				
Sensitivity, Ext. Antenna:		25μV	25μV	25μV
Alternate Channel Selectivity:		45dB	45dB	45dB
Image Rejection:		40dB	40dB	40dB
IF Rejection:		60dB	60dB	60dB
Dimensions (Width × Height × Depth):		443 × 105 × 349mm	443 × 105 × 349mm	443 × 105 × 349mm
Weight:		8.1kg	7.4kg	7.2kg

* Measured without input anti-slewing and output isolation networks.

All features and specifications are subject to change without notice.