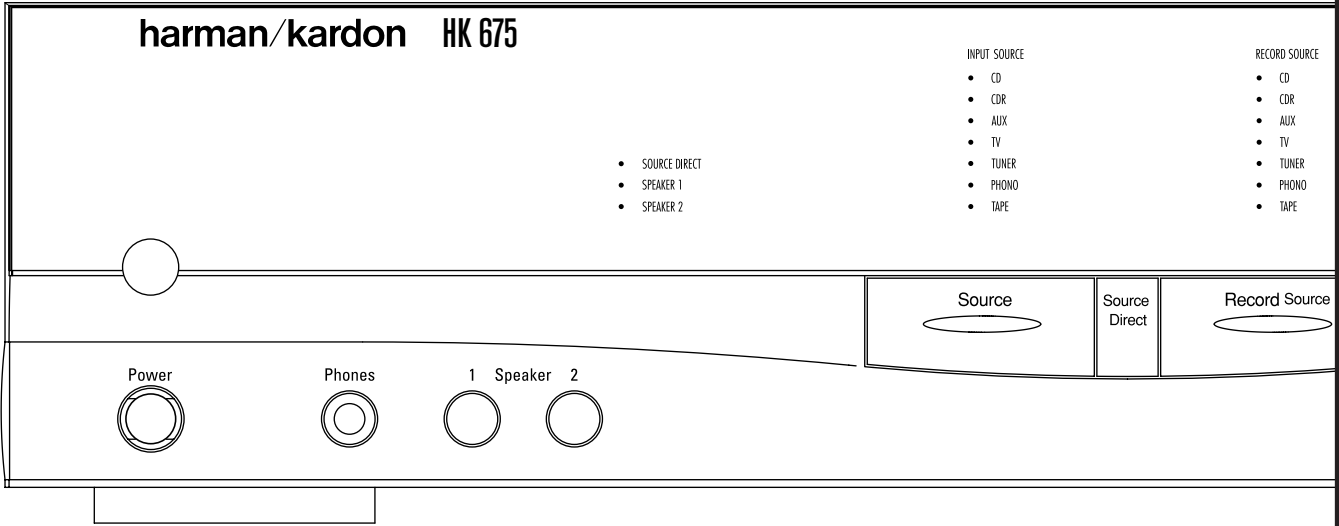


HK 675 Integrated Amplifier

OWNER'S MANUAL



harman/kardon®

Power for the Digital Revolution®

Table of Contents

- 3 Introduction
- 4 Connections
- 5 Controls and Functions
- 6 Remote Control
- 7 Operating Instructions
- 7 Troubleshooting
- 8 Specifications

DECLARATION OF CONFORMITY



We, Harman Consumer International
2, route de la Tour
F-72500 Château-du-Loir
France

declare in own responsibility, that the
product described in this owners manual
is in compliance with technical standards:

EN60065:1998
CB Certificate

Carsten Olesen
Harman Kardon Europe
01/04

The appliance conforms with EEC directive
(73/23 EEC) regarding interference suppression.

DECLARATION OF CONFORMITY



We, Harman Consumer International
2, route de la Tour
F-72500 Château-du-Loir
France

declare in own responsibility, that the
product described in this owners manual is
in compliance with technical standards:

EN55013/A 12/8.1994, EN55020/12.1994
EN60555 Part 2 & 3/4.1987

Carsten Olesen
Harman Kardon Europe
01/04

The appliance conforms with EEC directive
(89/336/EEC) regarding interference suppression.

Introduction

Congratulations on your choice of the Harman Kardon HK 675 Integrated Amplifier.

In order to obtain the best performance from this integrated amplifier, please be sure to read this owner's manual and use your integrated amplifier only in accordance with its instructions.

The special features of this unit include:

**HCC
(High Instantaneous Current Capability)**

The 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 circuit or damaged speakers and wires, without impairing sound quality by the use of current limiting or output relays.

General instructions
Always Use at 230V AC
This unit is designed for operation with 230V AC. Use only domestic AC outlets. 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, turn the unit off completely by pressing the round Power button above "Power" (see page 5). Do not place furniture or other heavy objects on the cord, and try to avoid dropping heavy objects on it. Also do not tie 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 on them. Otherwise, the temperature inside the unit may rise, possibly affecting its long-term reliability.

To maintain proper ventilation, make sure there is at least 10 cm of space above and around the amplifier.
Do not place a CD player or other equipment on top of the amplifier.
Do not expose the amplifier to dripping or splashing. Do not place objects filled with liquids, such as vases, on or near the amplifier.

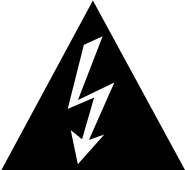
Moving the Unit
Before moving the unit, be sure to pull out the power cord from the AC outlet and disconnect the interconnection cords with other units.

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 pull 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 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 agents, and avoid spraying an insecticide near the unit.


Warning Signs
If you detect an abnormal smell or smoke, immediately turn the amplifier off and unplug the power cord. Contact your dealer or nearest Harman Kardon service center.

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




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.



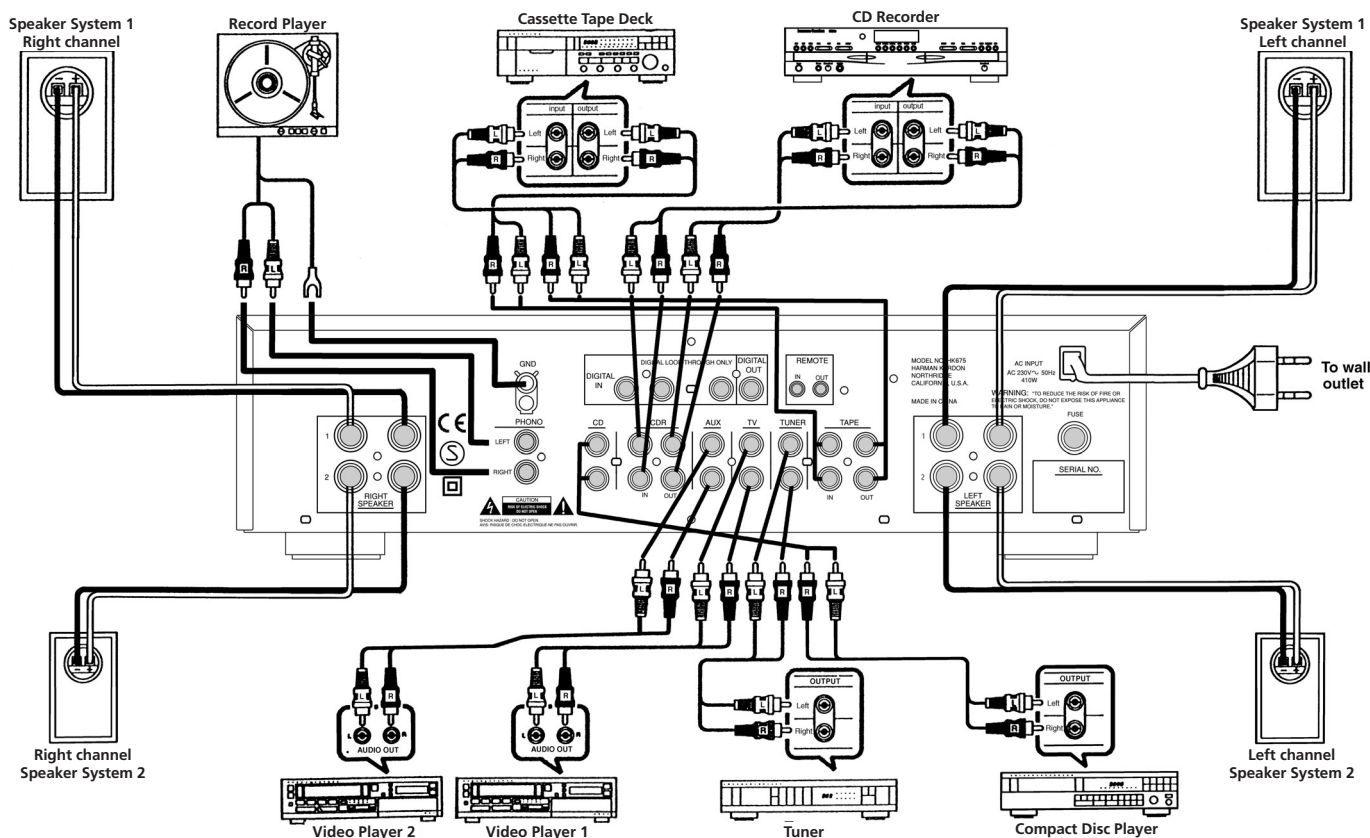
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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.

Connections



Connecting Other Components

1. Make sure your amplifier and other components are turned off.
2. Connect each component's Output/Play jacks to the corresponding Input jacks on the back of your amplifier and, if available, the component's Input/Record jacks to the Output jacks of the HK 675. Use the white, black or gray plugs to connect Left channel jacks; use the red plugs for Right channel jacks.
3. A record player with MM cartridge must be connected to the Phono Input jacks and a separate ground wire to the ground terminal screw above.

Wired Remote Control

To control your amplifier 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 amplifier. 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 amplifier'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	Min. Diameter
Up to 2.5 meter	1 mm
Up to 4 meter	1.25 mm
Up to 6 meter	1.6 mm
Above 6 meter	2-2.5 mm

2. Avoid rolling excess wire with or near signal interconnects.

IMPORTANT: When connecting two pairs of speakers, determine the impedance of each pair by looking on the back of the speakers, in your owner's manual, or by contacting your dealer or manufacturer.

You can listen to two pairs of speakers at the same time ONLY if the impedance of EACH speaker is NOT LESS THAN 8 Ohms.

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

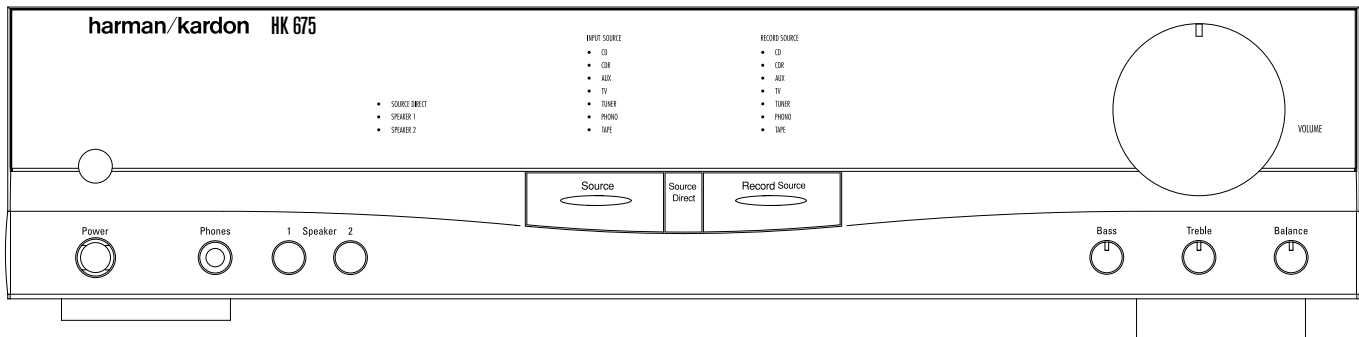
Digital Loop-Through

Digital inputs and outputs are provided only as a convenience for connecting various digital components to the "CD", "CDR" and "AUX" digital inputs. The corresponding digital input signal is fed to the "DIGITAL OUT" connector when "CD", "CDR" or "AUX" is selected as input source, to provide a digital signal for CD or MD Recorders. The HK 675 cannot process, decode or convert any digital signal.

AC Power

Plug the cord into a 230 VAC wall socket.

Controls and Functions



Power switches

Press the round Power button (above "Power") to turn the amplifier on for the first time. The status LED behind the flat "Power" button will turn orange. Once the unit has been turned on with the round power button, this button should be left on for normal use and only turned off when the amplifier will not be used for extended periods of time (vacation, etc.). For daily use, press the flat "Power" button to turn the amplifier on or off (Standby). In Standby the LED will glow orange, indicating that the unit is still connected to AC mains and can be turned on from the remote control or with the flat "Power" button.

Headphone Jack

Plug in headphones if desired. With both "Speaker 1" and "2" selectors in the Off position, output is supplied only to headphones.

Speaker 1/2 Selectors

Press to select speaker pair 1 or 2, or both, or neither (headphone output only).

Input Source Selector

Select desired input source for listening by pressing the "Input Source" button repeatedly (on the left will select upwards, right downwards) until the indicator for the desired source is illuminated.

Record Source Selector

Select desired source for recording to device connected to the rear panel Tape and CDR Out sockets by pressing the "Record Source" button repeatedly until the indicator for the desired source is illuminated.

Bass Control

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

Treble Control

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

Balance Control

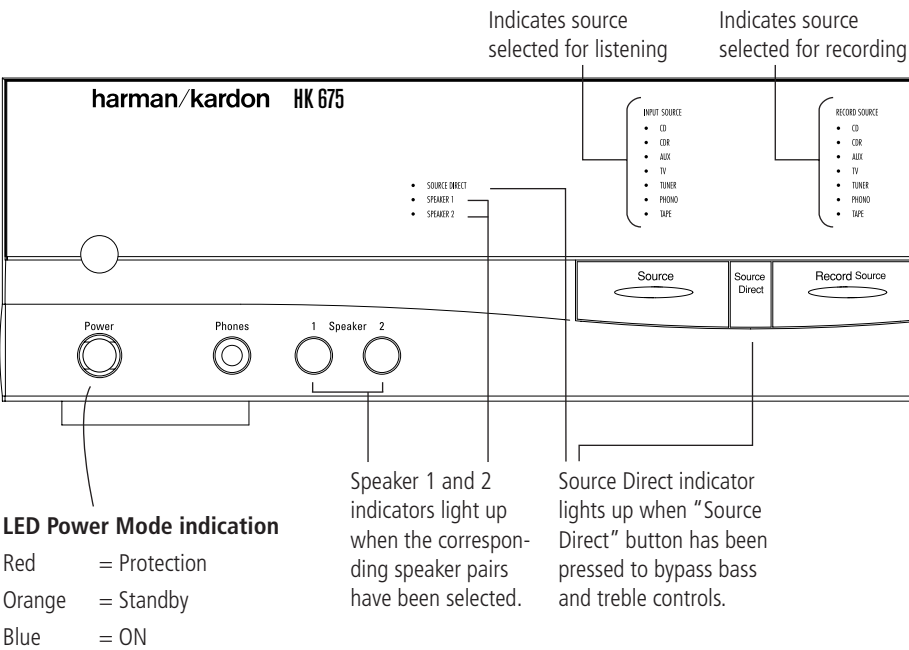
Turn to adjust relative output level of left and right speakers.

Volume Control

Turn to raise or lower output volume.

Source Direct

Press to bypass tone control circuitry.



Remote Control

Independent Remote Control

The system remote of the HK 675 can control the amplifier and compatible Tuners, CD Players and CD Recorders. The remote In jack of units without an integrated IR receiver must be connected to the amplifier's remote control output jack so that the system remote control can operate them.

The Function Table below will show all functions of the HK 675 and external devices that can be controlled by the HK 675 remote.

Important Notes:

- For controlling a tuner (only needed for the numeric buttons), CD Recorder or CD Player the appropriate input ("TUNER", "CDR" or "CD") must have been selected with the source buttons of the remote control (selecting on the front panel is not sufficient).
- Note that DVD players or tape decks cannot be controlled by the remote.
- To control a compatible CD Recorder "CDR" must be selected as input and the drive to be controlled (CDP or CDR) must be selected appropriately with the "CDP SELECT" or "CDR SELECT" buttons.

Operating Conditions

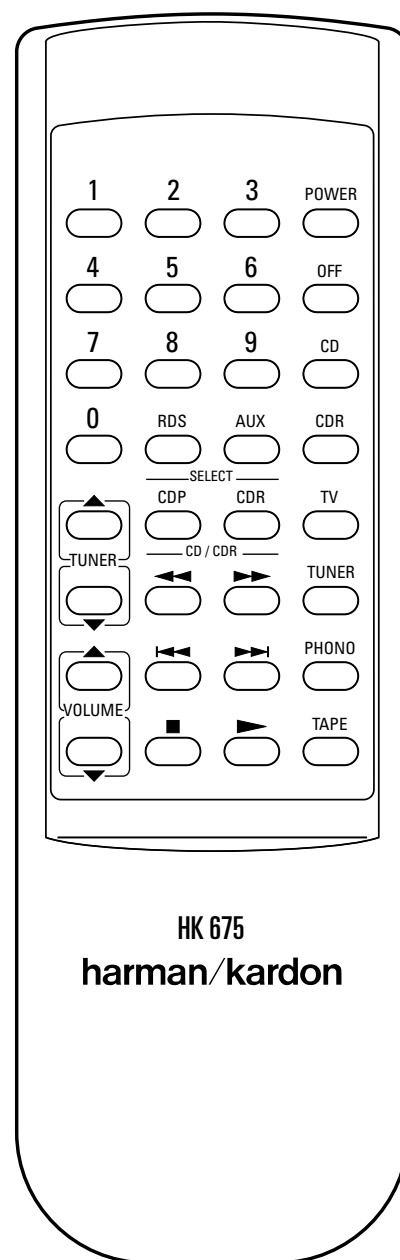
The control unit operates effectively within a distance of 7 meters and an angle of 30° from the amplifier. Using the control near fluorescent lights may shorten this range, as will any dust or dirt that accumulates on the front of the remote control or the remote sensor area of the amplifier. Also avoid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

The control unit is powered by two AA batteries, included with your amplifier. 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.

Remote button functions

Button	HK 675	CD Player	CD Recorder	Tuner
POWER/OFF	Power On/Off	-	-	-
▶▶ (Fast Forward)	-	Fast Forward	Fast Forward	-
◀◀ (Fast Reverse)	-	Fast Reverse	Fast Reverse	-
 ◀◀ (Skip Reverse)	-	Skip Reverse	Skip Reverse	-
▶▶ (Skip Forward)	-	Skip Forward	Skip Forward	-
■ (Stop)	-	Stop	Stop	-
▶ (Play)	-	Play	Play	-
0 ~ 9 (Numeric Buttons)	-	Track Select	Track Select	Preset Select
CD	Source Select	-	-	-
CDR	Source Select	-	-	-
AUX	Source Select	-	-	-
TV	Source Select	-	-	-
TUNER	Source Select	-	-	-
PHONO	Source Select	-	-	-
TAPE	Source Select	-	-	-
CDP SELECT	-	-	CDP Drive Select ¹⁾	-
CDR SELECT	-	-	CDR Drive Select ¹⁾	-
RDS	-	-	-	RDS Display Select
TUNER ▲	-	-	-	Tuning Up
TUNER ▼	-	-	-	Tuning Down
VOLUME ▲	Volume Up	-	-	-
VOLUME ▼	Volume Down	-	-	-

¹⁾ Only needed with CD Recorders



Operating Instructions

Listening to your CD player, tape deck, tuner or other source

1. Turn Volume control to minimum level and press the round Power button (above "Power") to turn the unit to Standby, the power indicator below will light orange. Then press the flat Power switch to turn on the amplifier. The power indicator lights red for a few seconds, while the protection circuitry checks for short circuit or other problems, and then it lights blue.
2. Press "Speaker 1" to hear loudspeakers connected to the rear Speakers 1 terminals. Press "Speaker 2" to hear loudspeakers connected to the rear Speakers 2 terminals. Press both to hear both speaker pairs at once. To listen to headphones only, press to turn off any active speaker pair.
3. Select desired source for listening by pressing the front panel Source button repeatedly until the indicator for the desired source is illuminated or by pressing the desired Source button on the remote.

4. Begin playing the desired source.
5. Adjust the Volume control to the desired level.
6. Adjust Bass, Treble and Balance controls as desired (the Source Direct function must be turned off).
7. Press "Source Direct" until the "Source Direct" indicator lights up to bypass the tone control and balance circuitry to ensure purest sound performance. Press again to turn the bypass function off and to make the tone and balance controls function again.

Making a recording

You may record any source to tape or to CD-R or to both simultaneously. You may also connect a second tape deck to the CDR inputs and outputs to record from tape to tape (in either direction).

To select the desired source for recording (this can be a different source than the one being listened to), press the "Record Source" button on the front panel repeatedly until the indicator for the desired record source is illuminated.

NOTE: The record output signal is taken directly from the program source and is unaffected by the Volume, Bass, Treble or Balance controls.

Important Notes:

- The functions "Source Direct" and "Record Source" can be selected on the front panel only, not from the remote control.
- 3-head cassette decks with monitoring function can be connected to "Tape" or "CDR" connectors too, but their monitoring function cannot be used.

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...

No lights illuminate when power cord is plugged into AC outlet.

Make sure that...

- The unit is plugged into a live outlet.
- The round power button above "Power" on the front panel is pressed in.

No sound is heard.

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

Sound is not heard from the speaker system on one side.

- The speaker wires and connection wires are connected correctly.
- The balance control knob is set to the center.

When listening to stereo sound, the left and right sounds are reversed.

- The speaker wires are connected correctly.
- The wires between components are connected correctly.

Intermittent or continuous buzzing or hissing.

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

The remote control and front panel controls don't appear to work.

- Disconnect the AC line cord from the wall socket, wait 5 minutes and then re-connect it.

Humming noise when listening to LP

- Ground wire from record player has been connected to ground terminal on amplifier.
- Cable from record player is away from power cords and speaker cables.

Howl or ringing when listening to LP.

- Record player is not too close to speakers.
- Record player is on stable surface.

Low sound level when listening to LP.

- Cable from record player is connected to the Phono jacks.
- The phono cartridge is MM, not MC.

Specifications

Continuous Average Power Per Channel (FTC) 20 Hz – 20 kHz, both channels driven	8 Ohms:	NOMINAL 80 Watts@<0.09%THD
	4 Ohms:	120 Watts@<0.3%THD
Dynamic Power (IHF, 1 kHz Tone Burst)	8 Ohms:	115 Watts
	4 Ohms:	200 Watts
	2 Ohms:	295 Watts
	1 Ohms:	380 Watts
High instantaneous current capability (HCC)		±80 Amps
Power Bandwidth @ Half-Rated output, 8Ω		<10 Hz - 150 kHz
Frequency response @ 1W (+0/-3dB)		5 Hz - 150 kHz
Damping factor (20Hz-20k Hz)		>125
Signal-to-noise Ratio (Reference rated power output, A-WTD)	Tuner/CD	95 dB
	Phono (MM):	75 dB
Input sensitivity/Impedance	Tuner/CD	270mV/43k Ohms
	Phono (MM):	4.0mV/47k Ohms
Overload:	Tuner/CD	6V
	Phono (MM):	110 mV
Tone control range, Bass @ 50 Hz/Treble @ 10 kHz		±10 dB/±10 dB
Power supply:		AC 230V, 50/60 Hz
Power consumption:		345 W
Dimensions (Width x Height x Depth):		439 x 110 x 395 mm
Weight:		10.35 kg

harman/kardon

H A Harman International Company
 250 Crossways Park Drive, Woodbury, New York 11797
www.harmankardon.com
 Harman Consumer International:
 2, Route de Tours, 72500 Château-du-Loir, France
 © 2004 Harman Kardon, Incorporated
 Part 5100-675000-000