

The Harman-Kardon Model 8+

Stereo/Quad
8-Track Cartridge Player

INTRODUCTION

With your purchase of the Harman/Kardon Model 8+ Stereo/Quad cartridge player, you have entered a new era of high fidelity enjoyment. The pages which follow describe the features and operation of the Model 8+. We urge you to read them carefully before proceeding to put your new cartridge player into operation.

WARRANTY and SERVICE POLICY

POLICY

We warrant each unit to be free from defects in material and workmanship under normal use and service, and in accordance with the conditions set forth below. Should a defect occur within the period specified, and provided that the unit is returned to either HARMAN-KARDON or an authorized HARMAN-KARDON warranty station, transportation prepaid, and which our examination shall disclose to our satisfaction to be defective, we will, for a period of one (1) year from date of purchase, either replace or repair and install any defective parts of the stereo receive free of charge.

EXCEPTIONS

This warranty does not include any obligation as to:

- a) repair or replacement of the wooden enclosure due to damage incurred after initial delivery.
- b) transportation charges to and from the factory or an authorized warranty station.

REGISTRATION:

To obtain service under the terms of this policy, it is necessary for you to retain your ORIGINAL BILL OF SALE. The enclosed registration card will NOT be considered proof of purchase.

In the event your equipment requires service during the warranty period, only presentation of your original bill of sale to either a factory-authorized repair agency or the factory, itself, will insure your rights under the policy, as outlined in this manual.

This warranty is not applicable to any instrument which shall have been repaired or altered in any way so as, in our judgment, to affect its stability or reliability or has been subject to neglect, misuse, abuse, negligence, or accident; or which has had the serial number altered, effaced or removed. Neither shall this warranty apply to any instrument which has been connected other than in accordance with instructions furnished by us.

SERVICE

HARMAN-KARDON has a special customer service division to answer all questions pertinent to the installation and operation of your unit. Please feel free to write to us at any time and we shall endeavor to offer prompt and complete advice.

If your problem cannot be resolved through our combined efforts, we may wish to refer you to a local authorized repair agency or we may prefer to authorize the return of your unit to the factory. In the event it must be returned, an authorization form and proper packing instructions will be forwarded to you. This authorization form **MUST BE RETURNED** with your unit.

UNDER NO CIRCUMSTANCES SHOULD YOUR UNIT BE SHIPPED TO THE FACTORY WITHOUT PRIOR AUTHORIZATION.

This warranty is in lieu of all other warranties, expressed or implied, and of all other obligations or liabilities on our part, and we neither assume nor authorize any representative or other person to assume for us any other liability in connection with the sale of this instrument.

DESCRIPTION OF 8-TRACK SYSTEM

The modern 8-track cartridge consists of a self-contained spool of continuous tape (closed loop), pinch roller and pressure pads enclosed in a sealed plastic case. The tape is run at only one speed, 3 ¾ inches per second, and travels across the front openings to permit contact with the playback head and capstan roller of the tape player mechanism.

The 8-track cartridge is available for playback in stereo (2 channels of information on 4 separate tracks) or *quadriphonic* (4 channels of information on 2 separate tracks). Approximate cartridge playing times are 45 and 22 ½ minutes respectively.

The Model 8+ will automatically switch to the correct 2 or 4-channel mode of operation when either a 2 or 4-channel tape cartridge is inserted.

INSTALLATION

Note: The Model 8+ does not contain record electronics, nor can it be employed without connecting to an external audio power source (i.e. stereo or quad receiver).

POWER REQUIREMENTS

Connect the AC line cord to any outlet supplying 117 volts, 60 Hz, AC current. The voltage may vary between 105 and 125 volts.

FUSE

This unit uses a standard 2-amp 3AG.

AUDIO OUTPUT CONNECTIONS

STEREO OPERATION (2 CH)

Connect the FRONT LEFT and FRONT RIGHT output receptacles located on the rear panel to the high level "tape monitor", "tape play", or "auxiliary" input receptacles on a stereo amplifier or receiver. In the Stereo mode, the BACK LEFT and BACK RIGHT output receptacles may be used as an extra pair of tape out receptacles for recording (dubbing) tapes into cassette or reel-to-reel tape recorders. They may also be used, if desired, to feed a second "remote" stereo system.

QUADRIPHONIC OPERATION (4 CH)

For Quadriphonic reproduction, this cartridge player can be connected to a 4-channel amplifier or receiver, or two separate stereo amplifiers or receivers. Thus the FRONT LEFT and FRONT RIGHT channel outputs on the tape deck are connected to the FRONT LEFT and FRONT RIGHT high level "tape monitor", "tape play", or "auxiliary" input receptacles of a 4-channel amplifier or receiver, and the BACK LEFT and BACK RIGHT channel outputs of the tape deck are connected to their corresponding inputs on the 4-channel amplifier or receiver. When two separate stereo amplifiers are used, the FRONT LEFT and FRONT RIGHT outputs are connected to Stereo Amplifier 1 and the BACK LEFT and BACK RIGHT outputs are connected to Stereo Amplifier 2.

VENTILATION

This unit employs solid-state circuitry which generates very little heat. However, for prolonged trouble-free operation do not place the unit on top of or near heat generating devices or equipment.

OPERATION

CARTRIDGE LOADING

To turn the 8+ cartridge player on, merely insert either a stereo or quad cartridge into the tape cartridge receptacle. This will activate the tape playback mechanism while simultaneously illuminating the red indicator lamp, track indicator numeral and either 2 channel or 4 channel indicator light.

A word of caution. To load either a stereo or quad prerecorded cartridge, insert it firmly with the exposed tape end first and the descriptive label facing up. Push in the cartridge until it snaps securely in place.

If none of the pushbutton controls on the front panel are depressed, the tape will play all programs continuously in sequence. Adjust the level by using the volume control of the amplifier to which the cartridge player is connected.

STEREO OPERATION

If a stereo cartridge is selected, the unit will automatically play in the stereo mode and the stereo indicator labeled 2 CH will light up on the front panel. One of the track selector indicators (1, 2, 3, or 4) will be illuminated.

QUAD OPERATION

If a Quadriphonic cartridge is selected, the unit will automatically play in the quadriphonic mode and the quad indicator labeled 4 CH will light up on the front panel. Track selector indicator (1 or 2) will be illuminated.

INSTANT REJECT

This button serves a dual function. It ejects the cartridge from the deck and automatically turns off the machine. *Caution* — Do not pull out the tape manually. *Always* use the INSTANT EJECT button for immediate removal of the cartridge.

REPLAY

This button is used to repeat the individual track in operation as shown by the illuminated track selector indicator. It will repeat this track indefinitely unless deactivated. To deactivate, simply press in and release.

END OF TRACK EJECT

When this button is depressed the cartridge will eject automatically at the end of the track in operation. It may be activated at any time during play.

END OF CARTRIDGE EJECT

This button may be depressed at any time during play. At the end of all four tracks in stereo, or two tracks in quad, the cartridge will automatically eject and the tape mechanism will shut off.

TRACK SELECT

This button enables manual selection of any of the available tracks. It should be depressed momentarily and released. The deck will then move up to the next track in numerical sequence. The illuminated track indicator will light up as each track is selected.

CARTRIDGE STORAGE

The cartridge is purchased in a dust-proof cardboard container which provides protection. The cartridge should be placed in its container open-end first, label side out. Store the cartridge (in its container) at room temperature, away from any source of heat and away from any magnetic fields (e.g. speaker magnets, transformers, or electric motors).

MAINTENANCE

As the tape passes over the tape heads and capstan, small particles of tape oxide and dust are deposited on these parts. After a period of time this may cause buildup of particles to the point where they become detrimental to the operation and fidelity of the tape player. For this reason, it is important

that you clean the parts mentioned above with a "Q" tip, slightly dampened with isopropyl alcohol (common household rubbing alcohol) or a commercially available head cleaner when required. Special head cleaning cartridges are also available.

CAUTION: This is the ONLY way to clean the Model 8+! DO NOT use any other types of alcohol, cleaning fluids, or tools. They may seriously damage the heads or the associated drive mechanisms.

DEMAGNETIZING

The tape heads, capstan and tape guides slowly build up a residual magnetic field as the tape passes over them. When the level of magnetism reaches a certain point it can adversely affect your tapes. An 8-track cartridge demagnetizer may be purchased at moderate cost from any electronic supplier carrying tape recording accessories. Follow the instructions supplied with the demagnetizer very carefully! It is advisable to demagnetize each time you have finished cleaning the recorder.

LUBRICATION

The Model 8+ has been fully lubricated at the factory. No other lubrication should be necessary for some time. If lubrication should become necessary at some future date, be sure to have this done only by a qualified technician.

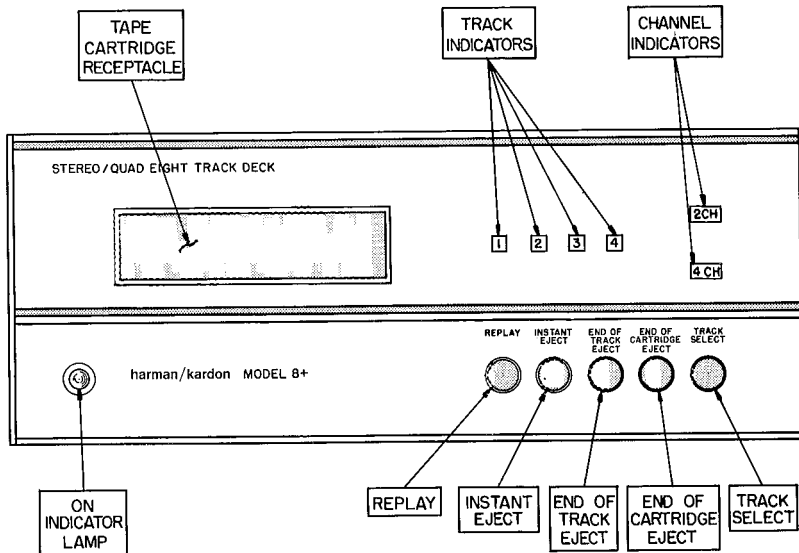
HUM

In any high fidelity installation, hum may be caused by interconnecting associated equipment. If the addition of the Model 8+ to your system is accompanied by previously non-existent hum, reverse the AC line plug in its socket. If this does not help, you may have defective interconnecting cables, or the cables may be located too near a strong AC field, such as television, power transformer, AC motor, or power lines.

Note: If there is no sound output when a cartridge is fully inserted into the cartridge tape receptacle,

- 1) Make sure the function selector on your amplifier or receiver is properly set.
- 2) See that all volume controls on the amplifier or receiver are properly set.
- 3) See that the AC power cord is properly plugged into a 117V wall outlet or AC receptacle of associated high fidelity equipment.
- 4) Check the fuse on the rear panel for continuity (visually). If defective, replace with identical type.

FRONT PANEL



REAR PANEL

