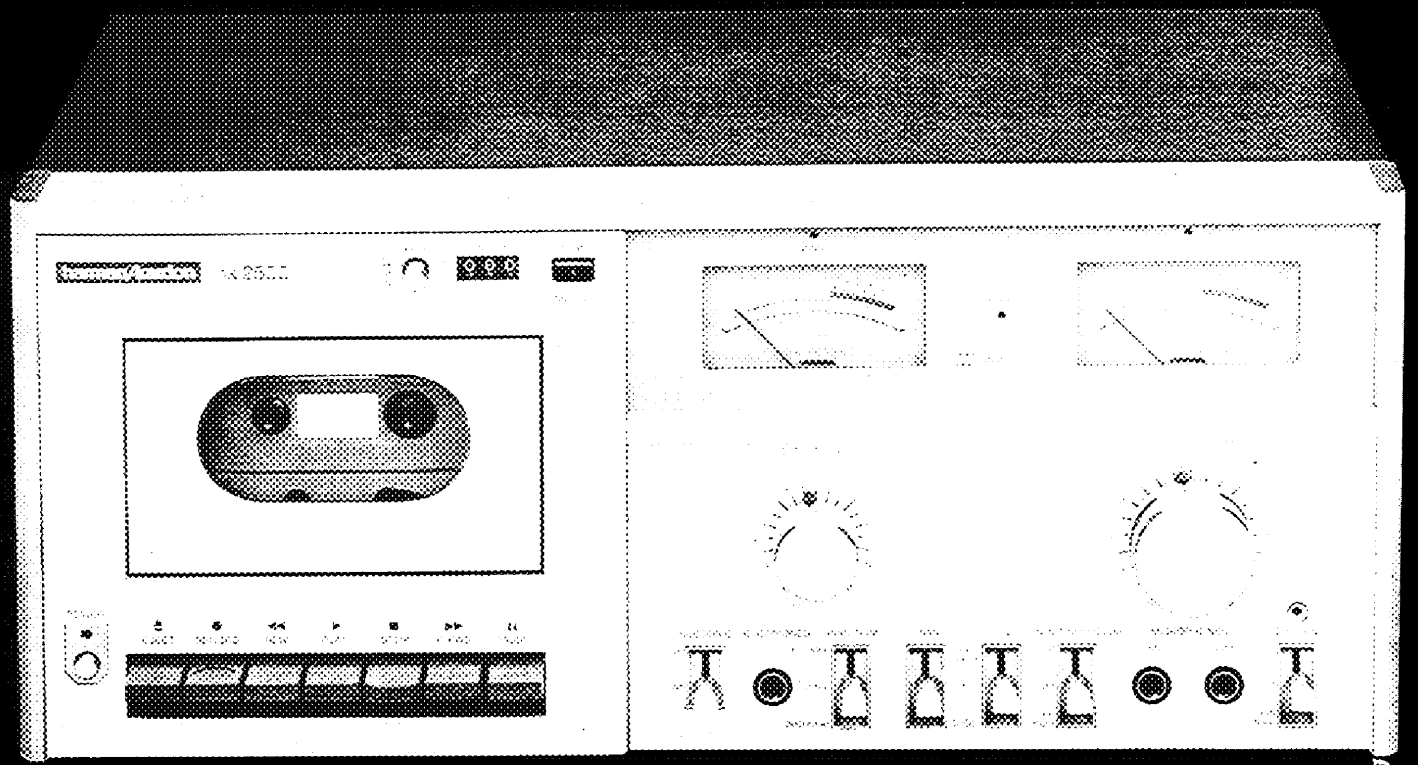
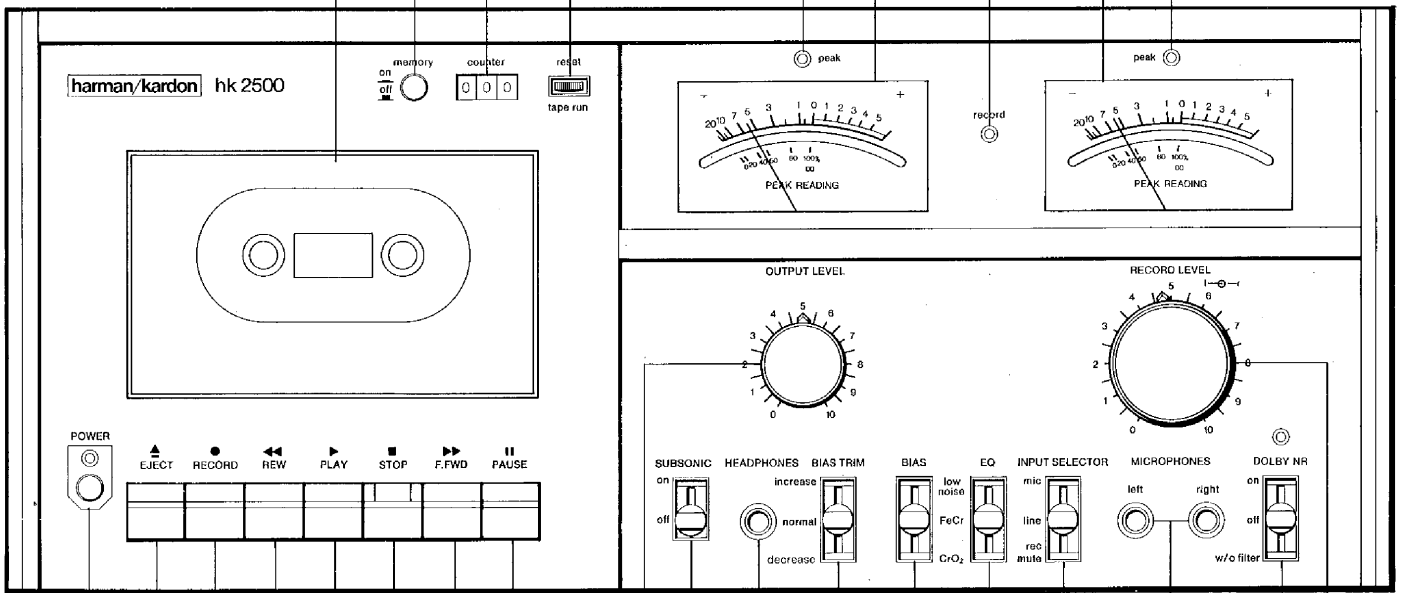
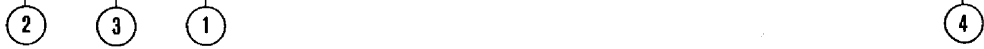
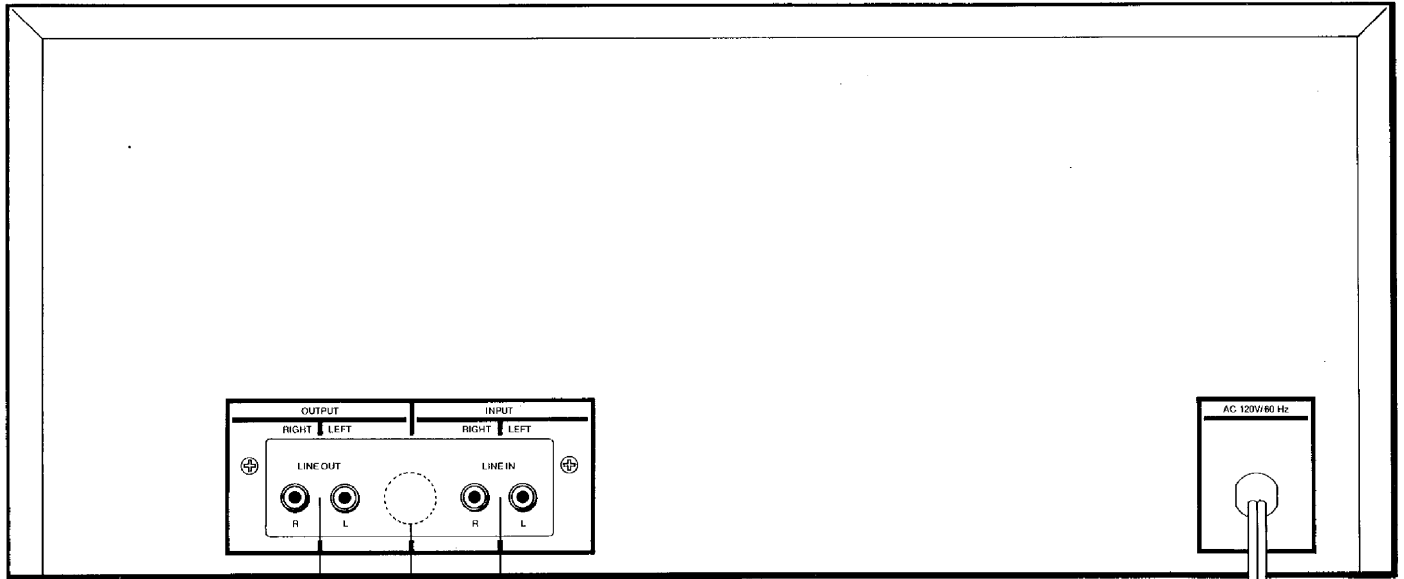




**OWNER'S MANUAL hk2500**

To ensure continuing high performance,  
read this manual carefully before you  
connect and operate your hk2500  
cassette deck.





## CONNECTIONS

Use the patch cords included with your Harman Kardon cassette deck to connect it to your preamplifier, amplifier, or receiver. Connect the left and right INPUT jacks (1) of the deck to the left and right RECORD OUT or TAPE OUT jacks of the preamplifier. Connect the OUTPUT jacks (2) of the deck to the TAPE IN, TAPE MON, or AUX jacks of your preamplifier.

On some versions of the deck, a 5-pin DIN jack (3) provides interconnection with your preamplifier.

Connect the power line cord (4) of the hk2500 to an AC convenience outlet on your preamplifier or to an AC wall outlet.

Connect headphones (low-impedance) if desired, to the HEADPHONES jack (5) on the front panel.

## Playback

Switch your preamplifier to the appropriate playback mode. Turn on the cassette deck. The red light-emitting diode (LED) above the POWER switch (6) will glow. If the cassette is Dolby-encoded, set the DOLBY switch (7) to ON. Set the EQ switch (8) for proper equalization of the type of tape: LOW NOISE (normal tape), FeCr (ferrichrome tape), or CrO<sub>2</sub> (chrome and chrome-equivalent tape). Press the EJECT lever (9) to open the cassette well door (10). Insert the cassette with the desired side facing you and the exposed tape facing down. Push the cassette well door closed until it latches.

Press the PLAY LEVER (11) and the tape will start. You can observe the reel hubs through the window in the cassette well door. The TAPE RUN indicator lamp in the counter RESET button (12) will glow to confirm tape motion. Adjust the volume with the OUTPUT LEVEL control (13) and

with your preamplifier's volume control. To stop the tape momentarily, press the PAUSE lever (14). To continue playback, press the PAUSE lever a second time and release.

If you press the RESET button (12) for a reading on the TAPE COUNTER (15) of 000 at a given point on the tape (for example, at the beginning of a selection), you can use the MEMORY switch (16) to return to that place. By placing the MEMORY switch in, the tape will stop automatically from the rewind mode when the counter reaches 000.

To advance the tape rapidly, press the FAST FORWARD lever (17). To go back to an earlier portion of the tape, press the REWIND lever (18). To stop the tape, press the STOP lever (19). Press the EJECT lever (9) to remove the cassette.

## Recording

Turn on the cassette deck. Set the BIAS (20) and EQ (8) switches for the type of tape: LOW NOISE (normal tape), FeCr (ferrichrome tape), or CrO<sub>2</sub> (chrome and chrome-equivalent tape). Press the EJECT lever (9) and load a cassette as before. Set the INPUT SELECTOR switch (21) to LINE to enable you to record from any program source that you have selected with your preamplifier's function control.

When recording from warped records, or from turntables subject to rumble or tonearm resonance, set the SUBSONIC filter switch (22) to ON. The subsonic filter affects the record mode only. For the lowest noise level in your recordings of FM stereo broadcasts, regardless of the tape used, set the DOLBY switch (7) to ON. This will

automatically engage a multiplex filter to eliminate the traces of the 19 kHz pilot signal present in FM stereo. This multiplex filter affects the record mode only. For low-noise recordings of other sources, set the DOLBY switch (7) to W/O FILTER. If you are recording with Dolby Noise Reduction, remember to make a note of that fact on the cassette label.

Hold the RECORD lever (23) down and press the PLAY lever (11). The RECORD LED (24) will glow to confirm that the deck is recording. The TAPE RUN indicator lamp in the counter RESET button (12) will glow to indicate tape motion. Press the PAUSE lever (14) to momentarily stop the tape. The RECORD LED will flash to indicate that the deck is in the record/pause mode.

If possible, use samples of the loudest material to be recorded to adjust the RECORD LEVEL controls (25). For your convenience, the left and right controls are concentrically mounted, so that you can turn both together, or each individually, as the situation requires. Set the controls so that the meters (26) peak occasionally past 0 dB. As an additional guide, two PEAK LEDs (27) will glow to indicate transient peaks, some of which may be too brief for the meters to follow. Do not let the meters move past 0 dB for extended periods, as this will result in audibly distorted recordings. Insufficient record levels, though, will result in unnecessarily noisy recordings. With practice, it is easy to set record levels for low-distortion, low-noise recordings. Once the record levels are set, press the PAUSE lever (14) and release to commence recording.

If you are recording from FM, you may wish to eliminate portions of the program, such as commercial messages. You can do this by simply activating the PAUSE

lever (14). However, to avoid an abrupt transition between the recorded portions of the program, as the desired section of the program comes to an end, first press and hold the INPUT SELECTOR switch (21) in its RECORD MUTE position. This prevents the program from being recorded onto the tape while allowing the tape to remain in motion. Then, after a suitable interval, press the PAUSE lever to stop the tape. Release the INPUT SELECTOR switch. As soon as the undesired portion of the program ends, release the PAUSE lever to continue recording. The desired portions of the recorded program will then be separated on the tape by the interval of silence that you have determined.

### **Live Recording**

The front panel MICROPHONES jacks (28) accept low-impedance microphones for live recording. For recording with microphones, switch the INPUT SELECTOR (21) to MIC and adjust the RECORD LEVEL controls (25) as outlined above. With only one microphone connected to either MICROPHONES jack, the incoming signal is fed to both channels, so that you can make a monophonic recording with one microphone.

### **Record Tabs**

Each blank cassette housing features record tabs. To preserve a recording from accidental erasure, break off the appropriate record tab with a small screwdriver. The tab for each cassette side is found on the *top left* side of the cassette when you hold the cassette with

the exposed tape facing down and the appropriate side facing you. To re-record over a cassette where the tabs have been removed, cover the appropriate tab-hole with a piece of adhesive tape.

### **Bias Trim**

Bias current during recording affects the high frequency response, maximum output level, and distortion levels of your tape recordings. Optimum recording requires the proper amount of bias for the tape formulation in use. The BIAS TRIM switch (29) offers fine adjustment of the bias setting. Make trial recordings and experiment with different settings of the BIAS TRIM switch to determine which setting is right for each tape formulation you use. In the DECREASE position, you may notice a relative *increase* in high frequency response. In the INCREASE position you may notice *decreased* highs. Set the BIAS TRIM switch for the most accurate overall tonal balance. Make a note of your conclusions and use the same bias setting whenever you record on that tape formulation. If you stay with one tape formulation, readjustment should not be necessary. Adjustment is never necessary for playback.

### **Demagnetizing**

Residual magnetism can build up on the record/playback head, the capstan, and the tape guides. You should demagnetize them after every 20 to 30 hours of use. To demagnetize, first remove all tapes from the general area and switch the cassette deck off. Gain access to the transport by opening the cassette well door.

Most demagnetizers can be used without removing the cassette well door. However, if necessary, you can gain further access to the transport mechanism as follows:

- 1 Turn cassette deck POWER switch (6) off.
- 2 Press EJECT lever (9).
- 3 On the inside of the black door frame, note 4 clear plastic clips holding silver door (10) to frame.
- 4 Remove silver door by
  - (A) bracing top edge of black door frame with both thumbs and
  - (B) using both index fingers under bottom of silver door to CAREFULLY slide silver door up toward you so that the 4 plastic clips slide up and off their notches.
- 5 Return black door frame to its closed position.
- 6 Press PLAY lever (11), raising the silver colored record/playback head to its highest position.

Activate the demagnetizer at a distance of about 4 feet (1.2 meters) from the cassette deck. Slowly approach the deck with the demagnetizer. Move the demagnetizer tip slowly back and forth just above the record/playback head (in silver housing) for 3 to 5 seconds. Do not touch the head with the demagnetizer tip unless the tip is covered with a protective vinyl or rubber. Slowly move the tip to the tape guides and then to the capstan (silver shaft, at right), repeating the 3 to 5 seconds of motion for each part. You need not demagnetize the erase head. Slowly draw the demagnetizer back to a

distance of about 4 feet (1.2 meters) from the cassette deck. Deactivate the demagnetizer.

If you have removed the cassette well door,

1 Press STOP lever (19).

2 Press EJECT lever (9).

3 Replace door by

(A) placing its 4 plastic clips (open ends facing down) through holes in black door frame and

(B) CAREFULLY sliding clips down over their notches.

### **Head and Transport Cleaning**

Tape oxide sheddings will accumulate on the heads, tape guides, capstan, and pressure roller. Gain access to the transport as described above. Clean all metal parts of the transport with a cotton swab dipped in denatured alcohol.

Because denatured alcohol will harden the pressure roller, it should be cleaned with aromatic hydrocarbon instead.

Thoroughly clean all surfaces that come into contact with the tape. If the cotton swab is particularly darkened with oxide sheddings after cleaning, you should clean the deck more frequently.

### **Maintaining the Appearance**

Clean the metal parts of the front panel with mild, diluted detergent applied with a soft cloth or cotton swab. Never use a strong abrasive cleaner.

Remove dust or smudges from the acrylic windows with diluted glass cleaner applied with a soft cloth. Do not use a strong solvent-type cleaner or ammonia.

The hk2500 is a high-quality precision instrument. If the instructions in this manual are followed thoughtfully, the cassette deck should provide many years of musical pleasure.