

harman/kardon hk300XM

owner's manual
manuel d'utilisation
bedienungsanleitung
manuale sul funzionamento
bruksanvisning



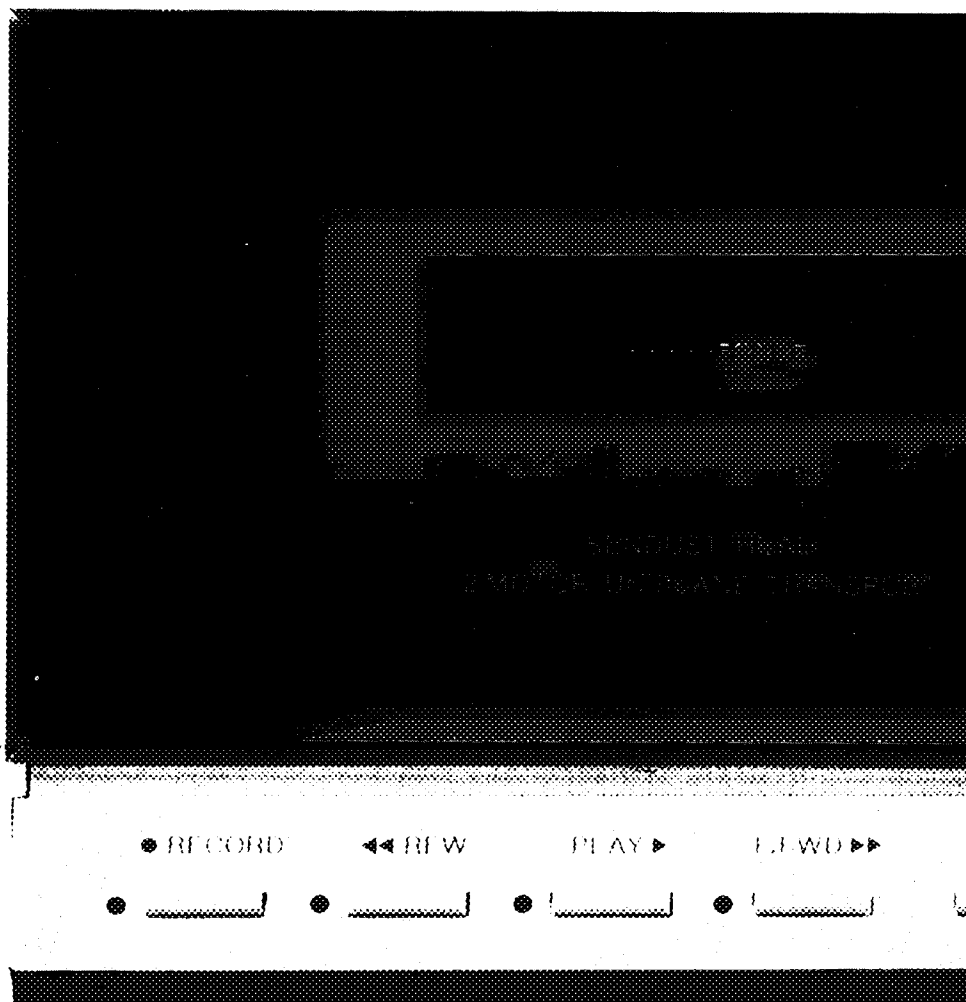
POWER



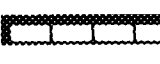
EJECT



REC MUTE



ULTRA WIDE-BAND LINEAR PHASE CASSETTE DECK



metal

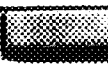
BIAS/EQUALIZATION

CrO₂

FeCr

LN

center dial



bias tone



100% OFF

100% ON

200% ON

1200/50

STOP ■

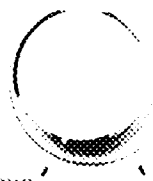
PAUSE II



level

MICROPHONES

BIAS FINE



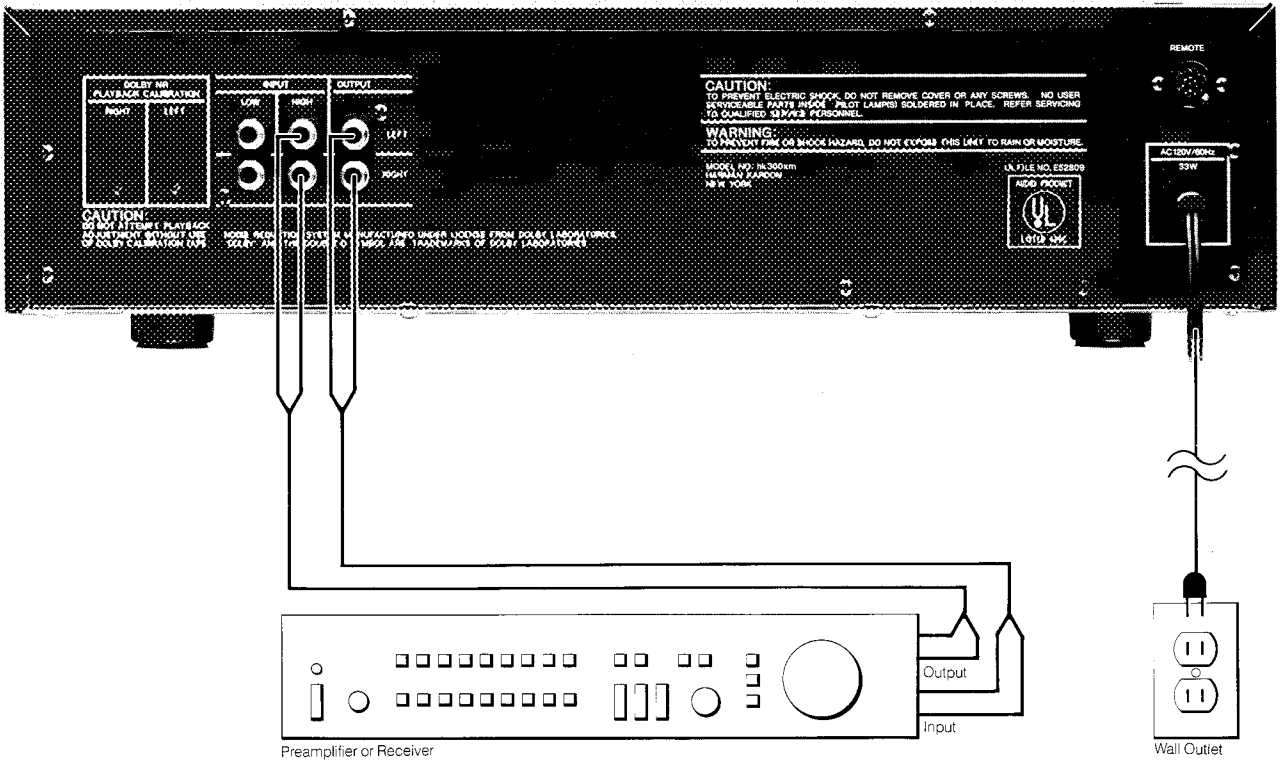
min max

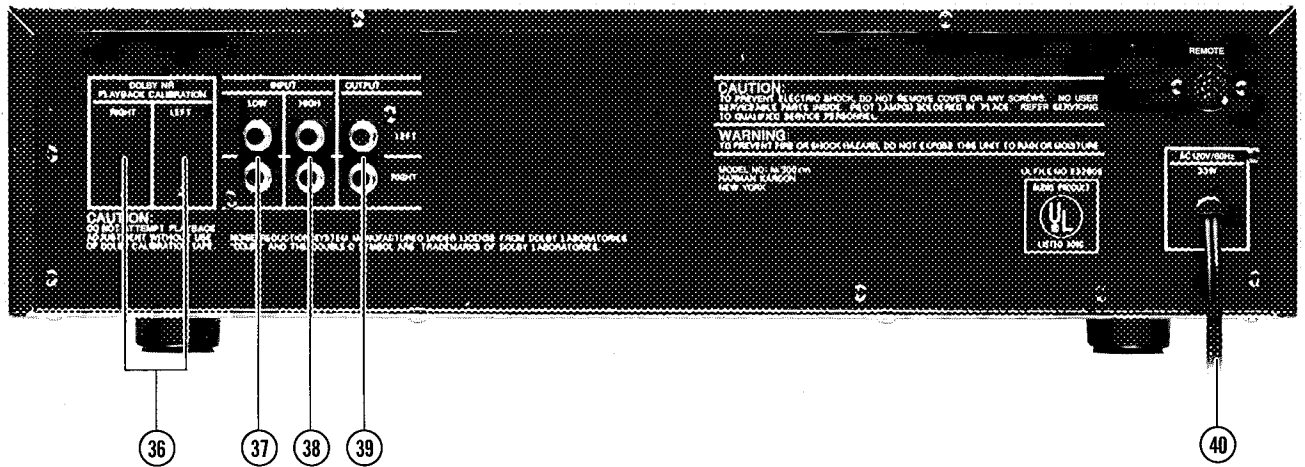
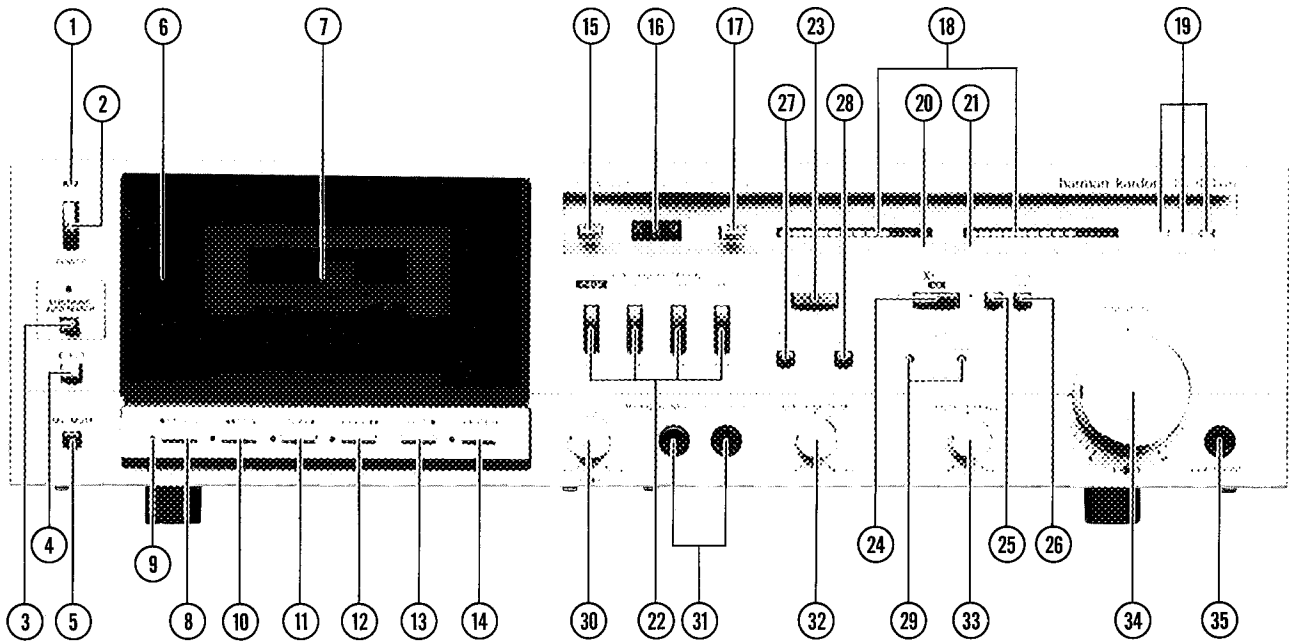
left

right

bi-ctrl







English

page 4

Français

page 8

Deutsch

seite 12

Italiano

pagina 16

Svensk

sida 20

Owner's manual hk300XM

Your investment in a component high fidelity system indicates that you have more than an average interest in music. The fact that your investment includes a Harman Kardon Ultrawide-band Metal Tape Deck shows us your appreciation of uncompromised reproduction in the music you enjoy. Throughout the design and manufacture of this unit, we made every effort to assure it will meet all of your expectations.

To ensure continuing high performance, read this manual carefully before you connect and operate your hk300XM tape deck.

Connections

For the moment, leave the POWER LINE CORD (40) of the 300XM unconnected. Put the unit on the table or shelf where it will be installed. Leave enough working space so you can make all the connections easily.

The 300XM requires adequate ventilation. It should not be installed on a cushion or rug and a minimum of 2 inches (5 cm.) clearance should be provided.

Connecting the 300XM to your preamplifier or receiver

Like most stereo equipment, your 300XM is fitted with pin-type RCA connectors. Using standard pin-type RCA patch cords (provided), connect the left HIGH INPUT connector (38) on your 300XM with the left tape output connector on your preamplifier or receiver. Connect the right channels similarly.

Using a second set of patch cords, connect the left OUTPUT connector (39) of the 300XM to the left tape input connector of your preamplifier or receiver. Connect the right channels similarly. Push the plugs in all the way so they are firmly seated, making good electrical contact.

If you find you are getting insufficient gain to achieve proper recording levels (as indicated by the PEAK LEVEL INDICATORS (18)), reconnect the cables from HIGH INPUT (38) to LOW INPUT (37) connectors.

If your preamplifier or receiver does *not* accept pin-type RCA connectors, consult your audio dealer for patch cords with proper adaptors.

Power connection

If you have completed the connections above, you are now ready to place the 300XM in its permanent position and plug the POWER LINE CORD (40) into an AC outlet. To turn the unit on and off, press the POWER switch (2). When power is on, the POWER indicator (1) will light.

Controls on the 300XM

Before using your cassette deck, it's important that you familiarize yourself with the various controls on the front panel.

Tape counter and reset

The TAPE COUNTER (16) is used for accurate location of particular passages on a tape. At the beginning of a tape, press the TAPE COUNTER RESET button (17) and the TAPE COUNTER (16) will return to "000." By keeping track of the TAPE COUNTER readout (16), you can easily return to any passage you like.

Memory rewind

The 300XM incorporates a special memory rewind that helps you locate a preset point on the tape automatically. If you wish to return to a specific point on the tape, press the TAPE COUNTER RESET button (17) at that point, resetting the TAPE COUNTER (16) to "000." To return to this point automatically at any time, simply press the MEMORY pushbutton (15) before you press the REWIND BUTTON (10). The tape will automatically stop when the TAPE COUNTER (16) reaches "000."

Note: The memory feature on the 300XM retains only one preset point at a time—selecting a new preset point clears the memory of the previous selection.

Electronic Auto Search

With the Electronic Auto Search system engaged, the deck will automatically scan a tape, in the fast forward mode, and play back eight seconds of music from each selection until the proper one is found and the system is disengaged. To engage the system, press the ELECTRONIC AUTO SEARCH button (3). The deck will scan to the next blank space between selections, then automatically switch to the playback mode. If the system is not disengaged by pressing the PLAY button (11) or STOP button (13), the deck will automatically shift back to the fast forward mode and repeat the process, scanning and sampling, until the end of the cassette.

Note: For the Electronic Auto Search system to function properly, a minimum of 2 seconds of blank space must be left between recorded selections.

Bias/equalization

The 300XM is equipped to play and record all types of tape formulations presently available, including the new metal tapes. To get the best possible performance from the tape you're using, choose the appropriate button from the BIAS/EQUALIZATION pushbuttons (22). "Low noise" (LN) for ferric tapes; FeCr for Ferrichrome tapes; CrO₂ for chromium dioxide tapes; metal for metal tapes.

Bias fine trim

For optimum recording, each brand and formulation of tape requires minor adjustment of bias trim.

To set the trim, insert a blank tape and select the proper bias/equalization setting. Dolby NR and Dolby HX shall be switched off. Using no program source, press the PLAY (11) and RECORD (8) buttons, and while the deck is recording, press and hold the RECORD CALIBRATION TONE button (28). Now rewind and replay the recording, note the reading of the PEAK LEVEL INDICATORS (18).

After you have noted the level of the record calibration tone on the peak level indicators, press the PLAY (11) and RECORD (8) buttons again and hold the BIAS TONE button (27). Now rewind and replay the recording of the tone while holding the BIAS TONE button in. If the reading of the bias tone is lower than the reading of the record calibration tone, rotate the BIAS FINE TRIM knob (32) clockwise (hi-boost). If the reading of the bias tone is higher than the reading of the record calibration tone, rotate the BIAS FINE TRIM knob (32) counterclockwise (hi-cut).

Each setting is correct only for the brand and formulation of tape in use. If you continue to use the same brand and formulation, readjustment is not necessary. But new adjustments should be made for different tapes.

Record calibration

For best results, the RECORD CALIBRATION set screws (29) should be adjusted for each formulation and brand of tape.

To set the calibration, insert a blank tape and select the proper bias/equalization setting. Using no program source, press the PLAY (11) and RECORD (8) buttons, and while the deck is recording, press and hold the RECORD CALIBRATION TONE button (28). Now rewind and replay the recording of the tone holding the RECORD CALIBRATION TONE button (28) in while listening. If the PEAK LEVEL INDICATORS (18) read 0 dB, record calibration adjustment is complete. If not, adjust the RECORD CALIBRATION set screws (29) (clockwise to increase the readings, counterclockwise to decrease them) and repeat the process until the reading is 0 dB.

Note: Some inexpensive tape formulations have low sensitivity. With such tape formulations you might encounter difficulty in obtaining 0 dB readings during the above calibrations. In such an event change to a better quality tape.

Dolby* playback calibration

In most cases, the factory setting of the DOLBY PLAYBACK CALIBRATION set screws (36) on the rear panel will provide best results.

However, if your listening room is very hot or very cold, adjustment may be necessary. For calibration, a special Dolby calibration tape (part # 00935520A available from Harman Kardon) is required. While playing this tape, adjust the DOLBY PLAYBACK CALIBRATION set screws (36) until the PEAK LEVEL INDICATORS (18) read 0 dB. Dolby playback calibration is now complete.

Output level control

A convenient OUTPUT LEVEL control (33) is incorporated into the 300XM to match the output level of your tape deck with all your other equipment. This prevents sudden bursts of high volume when switching from one program source to another.

Headphones

During recording you may wish to monitor the program source with headphones. The jack marked HEADPHONES (35) is included for this purpose. We recommend low impedance headphones (less than 1000 ohms).

Dolby HX and Dolby NR

The 300XM incorporates the new DOLBY HX headroom extension circuitry as well as Dolby NR circuitry. Together, they provide a big improvement in signal-to-noise-ratio and dynamic range, and we recommend the use of both on all recordings.

To record with the DOLBY HX process, press the DOLBY HX pushbutton (24) before recording. (The DOLBY HX pushbutton (24) automatically engages DOLBY NR circuitry).

When playing back a DOLBY HX recorded tape, it is not necessary that the DOLBY HX pushbutton (24) be in its "on" position (in). It is necessary to have the DOLBY NR pushbutton (25) in its "on" position (in) for proper decoding. The DOLBY HX system functions only during the recording process.

The 300XM will play tapes previously recorded with no loss of quality. Tapes recorded with DOLBY NR should be labeled so you remember to engage the system during playback.

Note: In some cases, recording from FM Broadcasts may contain more noise than was apparent during the original broadcast. To prevent this, place the MPX FILTER button (26) in its "on" position while recording from FM broadcasts.

To listen to cassette tapes

Set the tape monitor switch of your preamplifier or receiver to the monitor or tape position. Press the EJECT button (4) on your 300XM, and the CASSETTE DOOR (6) will automatically open. Carefully seat the cassette in the CASSETTE COMPARTMENT (7) with the exposed portion of tape facing down and the full spool to your left.

Once the CASSETTE DOOR (6) has been closed, press the PLAY button (11) and the cassette will begin to play.

To rewind the cassette or return to a previous passage, press the REWIND button (10) and allow the tape to rewind to the appropriate point. Then press the PLAY button (11) for playback.

To skip passages or to wind the cassette to its end, press the FAST FORWARD button (12) and allow the tape to wind forward to the appropriate point.

To remove your cassette from the cassette deck, press the STOP button (13), then the EJECT button (4). The CASSETTE DOOR (6) will automatically open and you may remove the cassette.

To record cassette tapes

To record a cassette, set the function switch of your preamplifier or receiver to the program source you wish to record from. Load a blank cassette as described above, making sure the cassette is rewound to its beginning. To record, press the PLAY button (11) and the RECORD button (8) simultaneously. The RECORD indicator (9) will light any time the cassette deck is in the record mode.

To optimize your recordings, the LINE LEVEL control (34) should be adjusted as high as possible without overload distortion. By adjusting the LINE LEVEL CONTROL (34) so that the PEAK LEVEL INDICATORS (18) read a maximum of 0 dB (+3 dB with metal tapes) you'll get a close approximation of the maximum recording level. However the HEADROOM SAFETY INDICATOR (19) provides a far more accurate basis for adjustment. The LINE LEVEL CONTROL (34) may be further adjusted to provide high record levels as long as the HEADROOM SAFETY INDICATOR (19) never shifts to its red position, indicating tape saturation. Occasionally, the HEADROOM SAFETY INDICATOR (19) may shift into the red even though the PEAK LEVEL INDICATORS (18) indicate "safe" levels. Regardless of the peak level readings, the recording level must be adjusted so that the HEADROOM SAFETY INDICATOR (19) never shifts into the red.

*Noise Reduction System and Headroom Extension System manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

During recording, there may be passages in your program source you wish to omit from your tape. To edit these passages out, press the PAUSE button (14) to stop the recording process, then when you wish to continue recording, press the PAUSE button (14) again.

Pressing the RECORD MUTE pushbutton (5) during recording will defeat the program source, but allow the deck to continue recording a blank signal.

Meter ballistics

Occasionally, fast transients in music will make it difficult to get a peak reading on the PEAK LEVEL INDICATORS (18). By pressing the METER BALLISTICS button (23) to "slow" position (in), the PEAK LEVEL INDICATORS (18) will hold their readings longer without affecting attack response time.

Live recording

The front panel MIC jacks (31) accept low impedance microphones (600 ohms or less) for live recording. For recording with microphones, plug the microphones into the MIC jacks (31) and adjust for proper record levels (as described above) using the MIC LEVEL control (30) instead of the LINE LEVEL control (34).

Record tabs

The plastic case on every blank cassette features record tabs. These are found on the TOP LEFT side of the cassette when you hold the cassette with the exposed portion of tape facing you. To preserve a recording from accidental erasure, break off the appropriate record tab with a small screwdriver. To re-record over a cassette where the tabs have been removed, cover the appropriate tab with a piece of adhesive tape.

To erase recorded material

Recording new material automatically erases previous material. To erase a cassette without recording new material, remove any microphones attached to the MIC jacks (31) and set the LINE LEVEL CONTROL (34) to "0." Then, using no program source, follow the instructions for recording.

Cleaning capstan and heads

The capstan and heads on your cassette deck should be cleaned after every 100 hours of use to prevent the accumulation of dirt and other materials that could interfere with recording and playback quality. Press the EJECT button (4) to open the CASSETTE DOOR (6). Clean all metal parts that come in contact with the tape with a cotton swab dipped in denatured alcohol. Clean the rubber pinch rollers with an aromatic hydrocarbon, as denatured alcohol will cause them to harden.

Maintaining appearance

Clean the metal 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 front window with diluted glass cleaner applied with a soft cloth. Do not use a strong solvent type cleaner or ammonia.

The 300XM cassette deck is a high-quality precision instrument. If the directions in this manual are followed thoughtfully, the cassette deck should provide many years of musical pleasure.

Congratulations.

Your new Harman Kardon High Technology Metal Cassette Deck is now properly connected and ready to use. We hope you'll enjoy it for years to come.

If in the future you consider upgrading your present system, we hope you'll consider our new line of High Technology Components. These include 4 receivers, an integrated amp, a preamp and a power amp. Each has been styled to be a perfect mate for our High Technology Metal Cassette Decks. And we're sure you'll find a component with all the power and features you're looking for.

Again, congratulations on your new cassette deck. With a little care it will provide enjoyment for a long, long time.