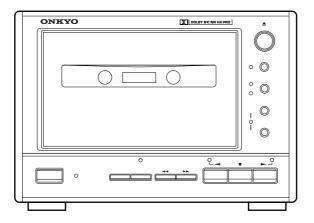


K-185X

Stereo Cassette Tape D Instruction Manual



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Thank you for your purchase of the ONKYO

K-185X Cassette Tape Deck.

Please read this manual thoroughly before making connections and plugging in the AC power cord.

Following the instructions in this manual will enable you to obtain optimum performance and maximum listening enjoyment from your new K-185X.

Please retain this manual for future reference.

Features

Advanced Two-Mode CD Dubbing with Peak Search When connected to Onkyo's CR-185X/CHR-185X CD Receiver, one touch of either the Album or Fade buttons not only starts CD-to-tape dubbing, it searches out the highest peaks on a CD and sets the ideal recording level. During Album dubbing, sophisticated circuitry checks the length of the last song against the remaining tape. If the entire song won't fit, recording will start from the song's beginning on side B. With Fade dubbing, the last song will fade out on side A and start again on side B.

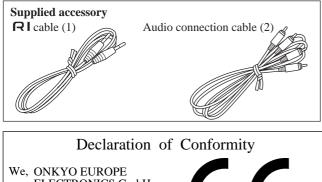
Dolby HX Pro Headroom Extension

Dolby HX Pro extends the dynamic headroom to capture the wider musical dynamics of CDs and other digital sources. It provides noticeably cleaner reproduction of those crucial higher frequencies by improving the tapes's ability to capture high-level signals without saturation. Another plus is the tapes you record with Dolby HX Pro can be played back on decks without Dolby HX Pro, for improved sound performance.

Dolby B/C Noise Reduction

You'll have no trouble making life-like, super-quiet recordings. Dolby B removes high-frequency hiss, while Dolby C works over a wider range for cleaner, more faithful dubs.

- Automatic Recording-Level Control
- One-Touch CD Synchronized Recording
- Auto Reverse
- Rugged Transport System
- Full-Logic Controls
- One-Touch On and Play
- **R** | (Remote Interactive) System Compatible



We, ONKYO EUROPE ELECTRONICS GmbH INDUSTRIESTRASSE 20 82110 GERMERING, GERMANY



declare in own responsibility, that the ONKYO product described in this instruction manual is in compliance with the corresponding technical standards such as EN55013, EN55020, EN61000-3-2, -3-3 and EN60065

ONKYO EUROPE ELECTRONICS GmbH

GERMERING, GERMANY

FOR CA		ODEL:
(POUR	LE MODELI	E CANADIEN)

• For models having a power cord with a polarized plug **CAUTION:**TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

• Sur les modèles dont la fiche est polarisée. ATTENTION:POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQ'AU FOND.

ATTENTION FOR BRITISH MODEL

Replacement and mounting of an AC plug on the power supply cord of this unit should be performed only by qualified service personnel.

ÎMPORTANT

The wires in the 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 appliance 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 in the plug which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

IMPORTANT

A 5 amp fuse is fitted in this plug. Should the fuse need to be replaced, please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark or the BSI mark on the body of the fuse. IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME, THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS IN-SERTED INTO ANY 13 AMP SOCKET.

If in any doubt, please consult a qualified electrician.

Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang and Olufsen. "Dolby," the double-D symbol and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

WARNING

"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

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.

Important safeguards

- **1. Read Instructions** All the safety and operating instructions should be read before the appliance is operated.
- **2. Retain Instructions** The safety and operating instructions should be retained for future reference.
- **3. Heed Warnings** All warnings on the appliance and in the operating instructions should be adhered to.
- **4. Follow Instructions** All operating and use instructions should be followed.
- **5. Water and Moisture** The appliance should not be used near water for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
- **6.** Carts and Stands The appliance should be used only with a cart or stand that is recommended by the manufacturer.
- 6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surface may cause the appliance and cart combination to overturn.

PORTABLE CART WARNING



- **7. Wall or Ceiling Mounting** The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or if placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings, there should be free space of at least 20 cm (8 in.) and open up behind the appliance.
- **9. Heat** The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- **10. Power Sources** The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- **11. Polarization** If the appliance is provided with a polarized plug having one blade wider than the other, please read the following information: The polarization of the plug is a safety feature. The polarized plug will only fit the outlet one way. If the plug does not fit fully into the outlet, try reversing it. If there is still trouble, the user should seek the services of a qualified electrician. Under no circumstances should the user attempt to defeat the polarization of the plug.
- **12. Power-Cord Protection** Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- **13.** Cleaning The appliance should be cleaned only as recommended by the manufacturer.
- **14.** Nonuse Periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- **16. Damage Requiring Service** The appliance should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E. The appliance has been dropped, or the enclosure damaged.
- 17. Servicing The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Precautions

1. Warranty Claim

You can find the serial number on the rear panel of the unit. In case of warranty claim, please report this number.

2. Recording Copyright

Recording of copyrighted material for other than personal use is illegal without permission of the copyright holder.

3. Deck Location

• Do not use or leave in direct sunlight or in other places subject to high temperature and humidity. The unit should also not be left in potentially hot places such as near heating appliances. Excessive heat and moisture can lead to internal damage and serious malfunctions (this also applies to cassette tapes).

The recommended ambient temperature range is 5° C to 35° C.

- Avoid damp and dusty places and locations prone to vibrations.
- Be extremely careful with the recording/playback heads. Clean and demagnetize them regularly, but under no circumstances should magnets or other metals be used anywhere near the heads.
- This unit is extremely sensitive to magnetic fields, so do not use near large speakers or other devices which generate magnetic fields.
- Hum may even be induced by magnetic flux leakage from the power transformer in certain amplifiers. Therefore, this unit should also be kept clear of the amplifier.
- Do not remove the cabinet case. If any of the internal parts are handled, there is a considerable danger of electric shock.

4. Cassettes to Avoid:

- Cassettes with poorly formed cases that rattle during rewind and fast forward.
- Low cost cassettes with no guide roller or pressure pad spring should never be used for stereo.
- C-120 cassettes because the tape and the coating are extremely thin, distortion levels are high. Also, even a slight stretching of the tape will make it susceptible to being caught up in the pinch roller and capstan.
- Endless tapes, if used for a long period of time, can overheat.

5. Power

WARNING

BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CARE-FULLY.

- The voltage of the available power supply differs according to country or region. Be sure that the power supply voltage of the area where this unit will be used meets the required voltage (e.g., AC230V 50Hz or AC120V 60Hz) written on the rear panel.
- Voltage Selector (Rear Panel)

Worldwide models are equipped with a voltage selector to conform with local power supplies. Be sure to set this switch to match the power supply in your area before plugging in the unit. Models without a voltage selector can only be used in areas where the power supply voltage is the same as that of the unit.

System connections

Connecting the unit to the Onkyo Separate Collection series; CR-185X (CD receiver), CHR-185X (CD receiver), and MD-185X (MD recorder).

Refer to the instruction manual of the CR-185X or CHR-185X for more information on connections.

Using this system allows you to use following system functions:

Connecting the Onkyo Separate Collection series

When this unit is properly connected to the CR-185X, CHR-185X and MD-185X, the following functions are available.

Timer function:

Timer Play (weekday): You can play from your selected source at the designated time weekday.Timer Play (weekend): You can play from your selected source at the designated time weekend.Timer Record: You can record your favorite programs from the tuner, starting at the designated time.Sleep Timer: You can set the system to automatically turn off after a certain time, up to a maximum of 90 minutes.Please see the instruction manual for the CD receiver (CR-185X or CHR-185X) for detailed operating instructions.

CD dubbing function

The CD dubbing function has the following four modes.

- ALBUM CD dubbing
- FADE OUT CD dubbing
- Continuous CD dubbing
- CD dubbing in the middle of a tape (See page 13 16.)

Remote control operation

You can operate the unit using the remote controller that comes with the amplifier. The buttons on the controller have the same function as those on the unit. (Refer to the instruction manual for the CR-185X or CHR-185X for more details.)

(The functions listed below can be controlled using the remote control of the master unit (Onkyo model only).)



CD synchro recording, MD synchro recording

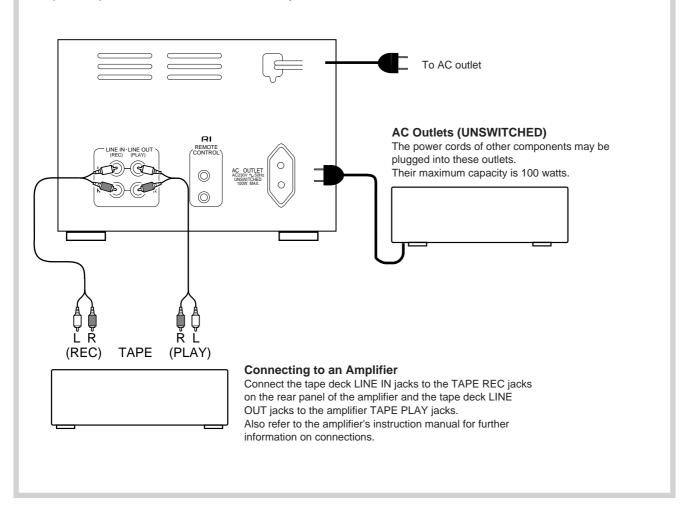
You can set up the system so that recording from a CD or MD to a cassette tape will synchronize playback of the CD or MD. (Refer to page 16 of this instruction manual.)

One-touch play

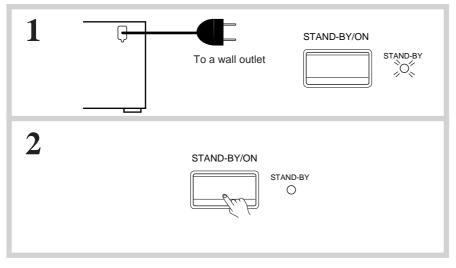
Pressing the PLAY button of the K-185X automatically selects the "TAPE" input source on the CR-185X/CHR-185X CD receiver before playing the tape.

Connecting the unit with other devices:

- Do not plug in the power cord until all connections have been made.
- On each pair of input or output jacks, the lower jack (marked R) corresponds to the right channel, and the upper jack (marked L) to the left channel. Also refer to the amplifier's instruction manual for further information on connections.



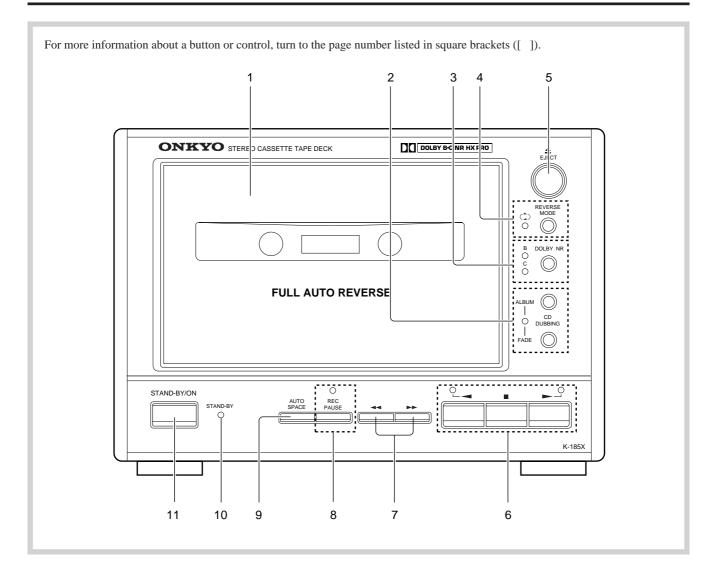
Power connections



Switching power on

- 1. Plug the AC power cord into a wall outlet.
- The STAND-BY indicator will light. 2. Press the STAND-BY/ON button.
 - The STAND-BY indicator will go out. • If this unit is plugged into the
 - amplifier's AC outlet, the amplifier's AC power cord must be plugged into a wall outlet and its power switched on before this unit will operate.

Control positions and names



- 1. Cassette holder [8]
- 2. CD DUBBING buttons and indicator (ALBUM/FADE) [13,14,15]
- 3. DOLBY NR button and indicators [8, 10]
- 4. REVERSE MODE button and indicator [8,10]
- 5. EJECT button (▲) [8]
- 6. Operation buttons
 - Reverse play button and indicator [8]
 - : Stop button [9]
 - Forward play button and indicator [8]

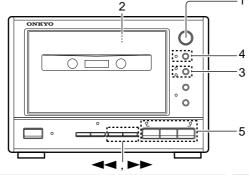
- 7. Fast forward and Rewind buttons (◀◀ , ►►) [9]
- 8. REC PAUSE button and indicator [10]
- 9. AUTO SPACE button [12]
- 10. STAND-BY indicator [6]
- 11. STAND-BY/ON button [6]

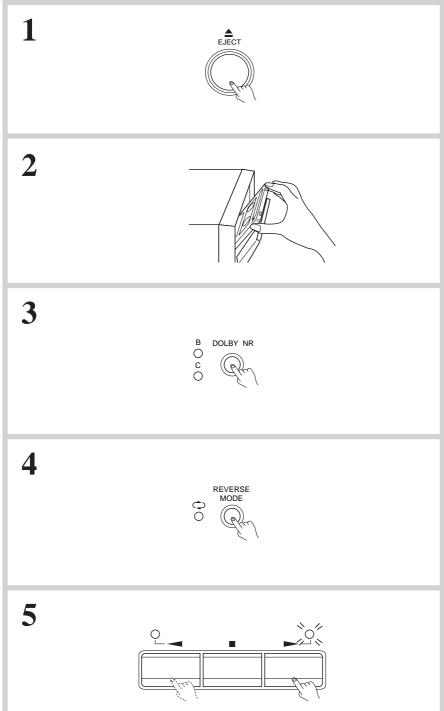
To play a tape

When this unit is properly connected to the CD reciever CR-185X/CHR-185X, pressing the button swiches input selector of CR-185X/CHR-185X to "TAPE/MD" automatically.

Note:

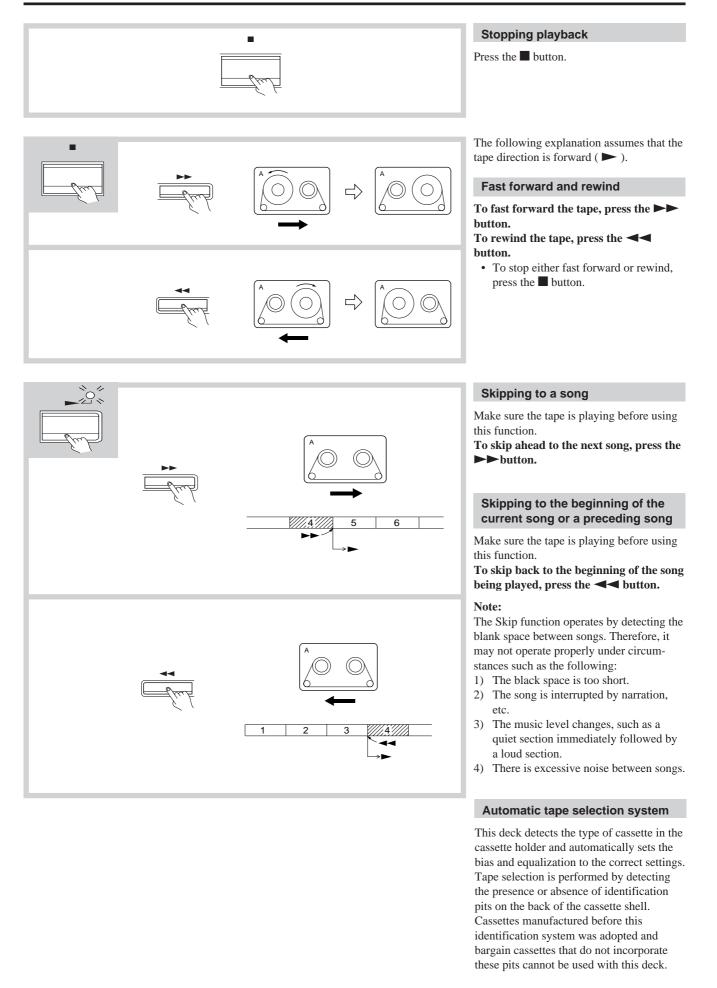
To eject the tape in play, be sure to first press the STOP button to stop the tape transport before pressing the EJECT button.





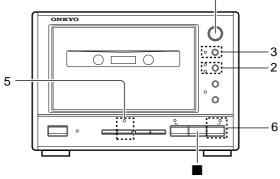
Listening to a tape

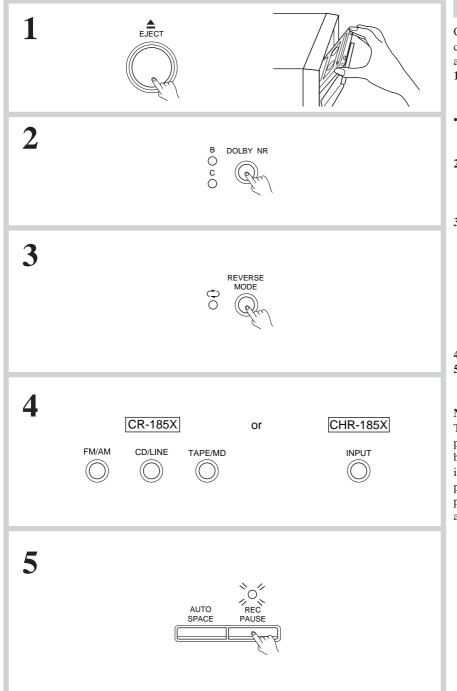
- 1. Press the EJECT button to open the cassette holder.
- 2. Insert a cassette.
- The side of the cassette with the exposed tape should be facing downward.
- 3. Set the Dolby NR by pressing the DOLBY NR button repeatedly until the proper Dolby NR indicator (B or C) turns on or off.
- Select the same noise reduction system that was used when the cassette was recorded. For instance, tapes recorded using Dolby B NR should be played back with Dolby B NR.
- 4. Press the REVERSE MODE button if you wish to select the auto reverse mode.
 - " () " turns off: Only one side of the tape is played back.
 - " () " turns on: Both sides of the tape are played back repeatedly eight times or until the ■ button is pressed.
- 5. Start playback.
 - Press the or button depending on which side of the cassette you wish to listen to.
 - Playback starts from the front side.
 - Playback starts from the reverse side.
 - The auto-stop mechanism will automatically stop the tape (depending on the tape transport mode) if a tape is played through to the end.



Recording

- Check to see if one or both of the cassette's erasure prevention tabs have been removed.
- Confirm that the cassette deck is properly connected to the amplifier.





Procedure for recording

1

Confirm that the amplifier is set up correctly for recording. (Refer to the amplifier's instruction manual for details.) **1. Insert the cassettes.**

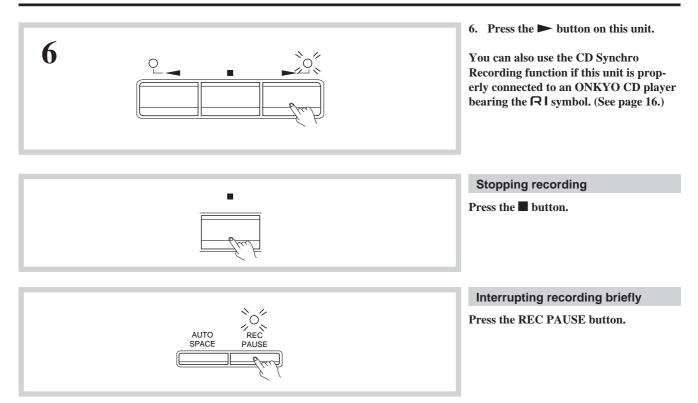
- Make sure the side to be recorded is facing outward.
- Recording is not possible on the tape leaders (the transparent sections you see at both ends of the tape.)
- 2. Set the Dolby NR by pressing the DOLBY NR button repeatedly until the desired Dolby NR indicator (B or C) turns on or off.
- 3. Press the REVERSE MODE button, if you wish to select the auto reverse mode.
 - " () " turns off: Only one side of the tape is recorded.
 - " () " turns on: Both sides of the tape are recorded.

If recording starts in the reverse direction, only side B is recorded.

- 4. Begin playing the source.
- 5. Press the REC PAUSE button.

Note:

This deck will not begin recording if you press the REC PAUSE and \blacktriangleright or \blacktriangleleft button at the same time. To begin recording, first press the REC PAUSE button to put the deck into the rec/pause mode, then press either the \blacktriangleright or \blacktriangleleft button as appropriate.



Making good sound recordings

Dolby Noise Reduction System

Dolby B NR is the system used in most cassette tape decks to reduce the background noise that is inherent in all cassette tapes. This deck also features Dolby C NR, an even more effective noise reduction system, developed by Dolby Laboratories in response to the demand for even better sound from cassette tapes.

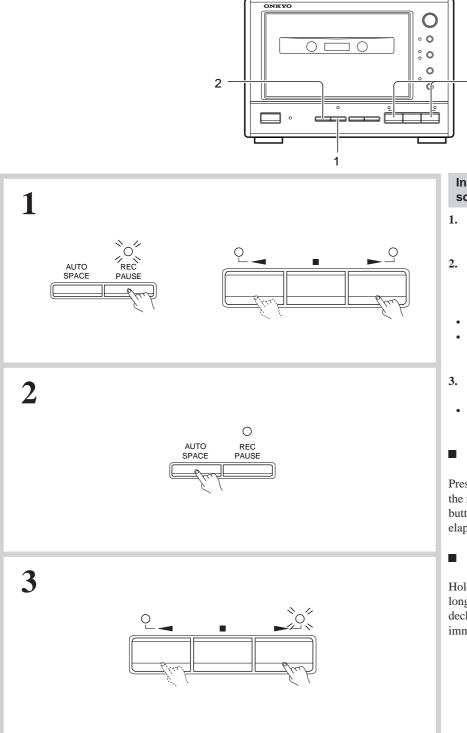
The Dolby HX Pro System

Tape sensitivity is constantly changing as recordings are made due to the biasing effect of high frequency audio signals. Dolby HX Pro is a system that compensates for these undesirable fluctuations during recording. It does not operate during playback, so cassettes recorded with Dolby HX Pro can be played back on decks not equipped with the system.

Note:

Dolby HX Pro operates independently of Dolby B and C NR, and only during recording.

Useful recording functions



Inserting blank spaces between songs when editing tapes

1,3

- 2. Press the AUTO SPACE button at any point during recording where you want to enter a blank space about five seconds long.
- The play indicator flashes on and off.
- After the blank space has been inserted, the tape stops automatically and the deck returns to the rec/pause mode.
- 3. To continue recording, press the ◀ or ► button.
 - The AUTO SPACE button works in both the record and rec/pause modes.
- To insert a blank space of less than five seconds between songs

Press the AUTO SPACE button to return to the rec/pause mode or press the \blacktriangleleft or \blacktriangleright button before a five-second period has elapsed.

To insert a blank space of more than five seconds between songs

Hold the AUTO SPACE button down for as long as you want the blank space to be. The deck will return to the rec/pause mode immediately when the button is released.

CD dubbing (System operation)

Recording	— Side A — 2 4 — Side B —	Erase /////3///// 3 Recording
Recording	— Side A	Fade-out
1	2	/////3////3/
√//5//////	4 [3
Fade-out	— Side B	Recording

CD dubbing function

When this unit is properly connected to the CD receiver CR-185X or CHR-185X and MD-185X, the following operations are performed.

CD dubbing modes

The CD dubbing function has the following four modes.

ALBUM CD dubbing:

If side "A" of a tape being used for dubbing finishes in the middle of a music track, then the incomplete track is erased and is rerecorded from the beginning of side "B".

FADE OUT CD dubbing:

Music which has been cut and faded out at the end of side "A" is recorded from the beginning on side "B".

Continuous CD dubbing:

Continuous dubbing is the function that enables super dubbing of several CDs continuously.

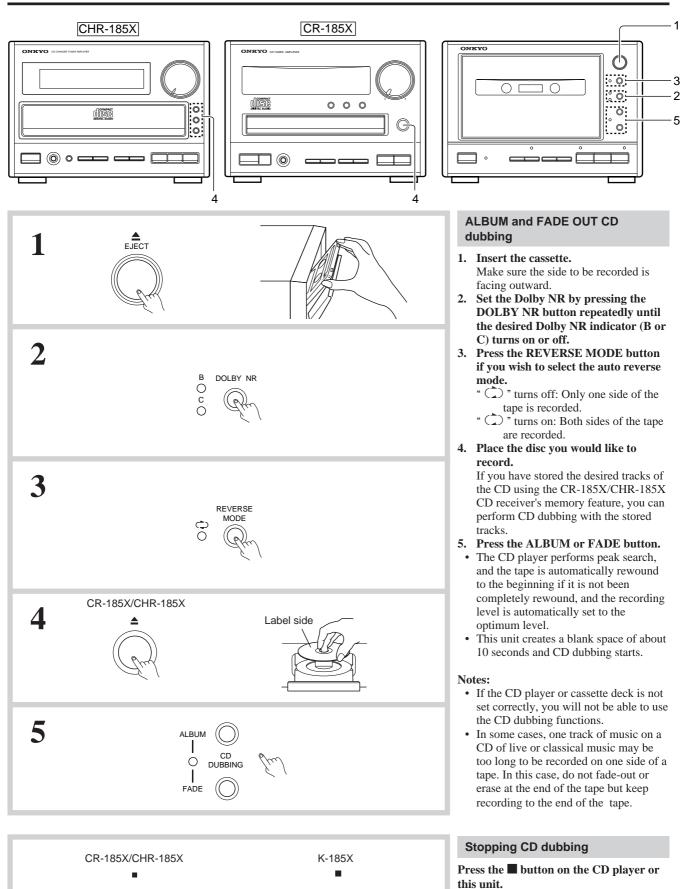
Be sure that there is enough space on the tape to continue recording.

CD dubbing in the middle of a tape:

This function will not automatically rewind the tape even if a super dubbing mode is used.

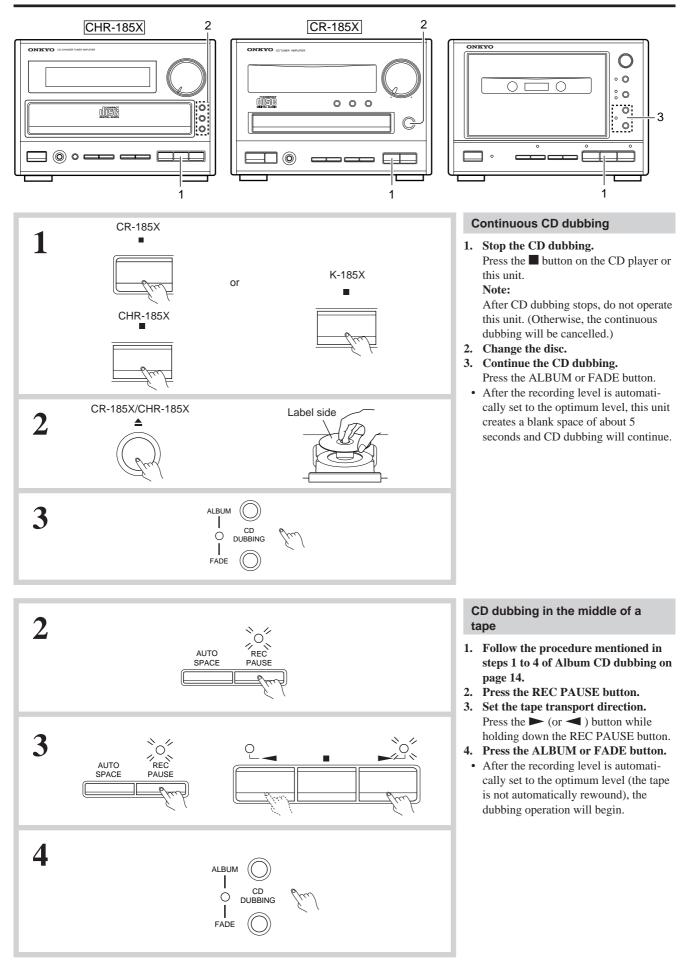
Operate this function as described below when dubbing after operating the cassette deck.

CD dubbing (System operation)



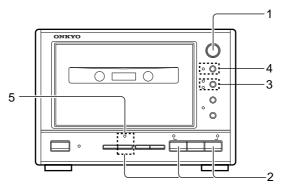
or

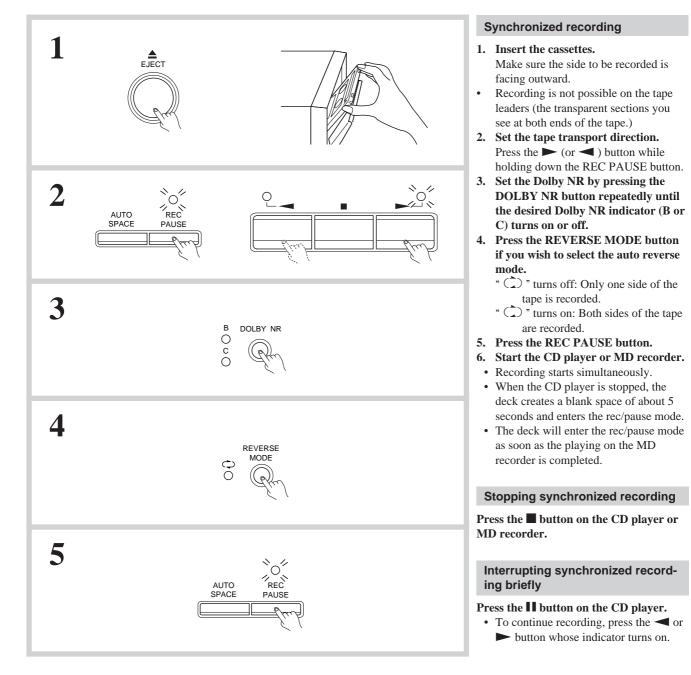
CD dubbing (System operation)



CD/MD synchro recording (System operation)

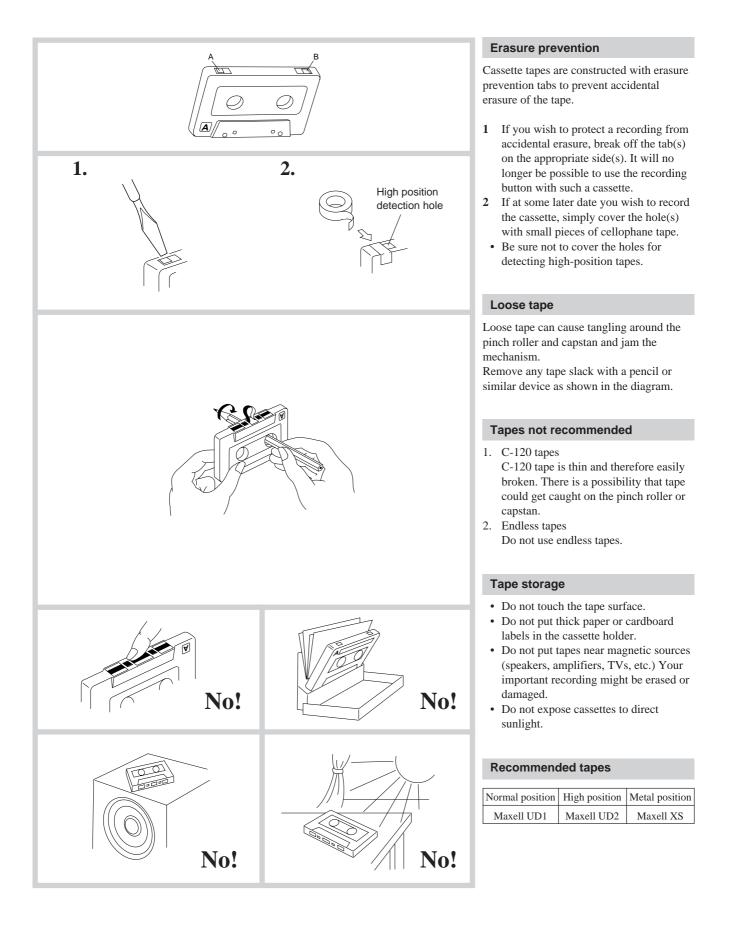
Once the K-185X is connected to a CR-185X/CHR-185X or MD-185X, pressing the \blacktriangleright button of the CD player or MD recorder will cause recording to start automatically on the K-185X.



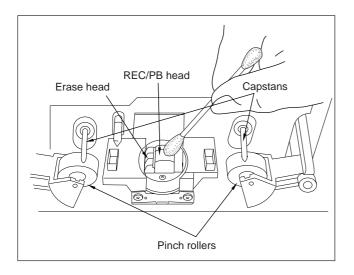


Handling cassette tapes

Examine cassette tapes carefully before using them with the K-185X.



Cassette deck maintenance



This deck requires no lubrication.

Head, Pinch Roller and Capstan Cleaning

Playback sound quality can be greatly diminished if magnetic particles are allowed to accumulate on the recording/playback head or playback head. Be sure to clean the head periodically, normally 2 - 3 times a month, to maintain your deck's original performance. Dirty heads may cause:

- Poor sound quality (loss of high frequency response)
- Decreased volume
- Skipping
- Incomplete erasure of previous recordings

If the pinch rollers and capstan are dirty, the tape may become tangled and damaged by wrapping around the pinch roller and capstan.

To prevent these problems, clean the heads, pinch rollers and capstans with a cotton swab dipped in cleaning fluid.

Demagnetizing

Residual magnetism builds up in the heads after the cassette deck has been used for an extended period of time. This buildup introduces noise and static into tapes and impairs high frequency response. To prevent this, demagnetize the heads with any commercially available head eraser once every 50 hours of use. Refer to the instruction manual of the head eraser for detailed instructions.

Specifications

Track Format:	4-track, 2-channels
Erasure System:	AC erase
Tape Speed:	4.8 cm/sec. (1-7/8 i.p.s.)
Wow and Flutter:	0.07 % (WRMS)
Frequency Response:	20 — 15,000 Hz (Normal)
	$(30 - 14,000 \text{ Hz} \pm 3 \text{ dB})$
	20 — 16,000 Hz (High)
	$(30 - 15,000 \text{ Hz} \pm 3 \text{ dB})$
	20 — 17,000 Hz (Metal)
	$(30 - 16,000 \text{ Hz} \pm 3 \text{ dB})$
S/N Ratio:	Dolby NR off: 58 dB (metal position
	tape)
	A noise reduction of 10 dB above
	5 kHz and 5 dB at 1 kHz is possible
	with Dolby B NR.
	A noise reduction of 20 dB at 5 kHz
	is possible with Dolby C NR.
Input Jacks:	Line IN: 2
	Input sensitivity: 600 mV
	Input impedance: 50 kohms
Outputs:	Line OUT: 2
-	Standard output level: 500 mV
	(0 dB)
	Optimum load impedance: over
	50 kohms
Motors:	DC servo motor $\times 1$
Heads:	REC/PB: 1
	ERASE: 1
Power Supply:	AC 230V, 50 Hz
	AC 120V, 60 Hz
Power Consumption:	11 watts
Dimensions:	$185(W) \times 131(H) \times 297(D) mm$
	(7-5/16" × 5-3/16" × 11-11/16")
Weight:	2.9 kg. (6.4 lbs.)

Specifications and external appearance are subject to change without notice because of product improvements.

Troubleshooting guide

The following guide lists problems which do not require professional servicing. If, however, the problem cannot be remedied using this guide, contact an ONKYO authorized service center for assistance.

• No power.

Cause: Power cord plug is loose. *Remedy:* Insert plug properly into outlet.

• Playback but no sound.

Cause: Incorrect connection.

Remedy: Check and connect correctly according to page 4.

Cause: Stereo amplifier input selector switch is set to incorrect position.Remedy: Change switch position.

• Tape does not move.

Cause: Slack tape wound around pinch roller. *Remedy:* Take up slack with a pencil (see page 17).

• REC PAUSE button does not engage.

Cause: No tape in cassette holder.
Remedy: Insert cassette tape.
Cause: Erasure prevention tab(s) removed.
Remedy: Change cassette or cover tab hole with cellophane tape.

• Hoarse sound, balance unstable.

Cause: Playback head dirty. *Remedy:* Clean head (see page 18). *Cause:* Tape is stretched. *Remedy:* Replace cassette.

• Excessive noise and tape hiss.

Cause: Head has become magnetized. Remedy: Demagnetize (see page 18). Cause: Tape with high noise level. Remedy: Replace cassette.

• Distorted sound.

Cause: Distortion in tape.

Remedy: Tape is probably bad but confirm by listening to another.

• Tape squeal and skipping.

Cause: Dirty heads, pinch rollers or capstan shafts.
Remedy: Clean (see page 18).
Cause: Cassette shell is binding tape or tape is stretched.
Remedy: Change cassette or try correcting with fast forward and rewind.

• Excessive hum during playback.

Cause: Connecting cables not inserted firmly. *Remedy:* Insert plugs firmly. *Cause:* External flux leakage from nearby amplifier or TV set. *Remedy:* Move deck away from hum source.

• High frequencies too strong.

Cause: Dolby NR encoded tape played back with NR off. Remedy: Select the appropriate NR mode using the DOLBY NR button. (Dolby B, C or S) for the tape being played back. Cause: Incorrect equalization.

Remedy: Confirm that cassette has tape type detection holes.

• No high frequency sounds.

Cause: Tape not encoded with Dolby NR played back with Dolby B, C or S NR on. *Remedy:* Select the appropriate NR mode using the DOLBY NR button (OFF). *Cause:* Heads have become dirty. *Remedy:* Clean (see page 18).

• Deck does not operate properly.

Cause: Tape transport control microcomputer has been exposed to interference from power supply or static electricity.

Remedy: Unplug deck and plug back in.

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