KENWOOD

STEREO CASSETTE TAPE DECK

KXF-W1030 KXF-W3030 CT-401 CT-403

INSTRUCTION MANUAL

KENWOOD CORPORATION

Before applying power

🛆 Caution: Read this section carefully to ensure safe operation.

Units are designed for operation as follows.

U.S.A. and Canada	AC 120 V only
China	AC 220 V only
Australia	AC 240 V only
Europe and U.K	AC 230 V only
*Other countries	AC 110-120 / 220-240 V switchable

For the United Kingdom

Factory fitted moulded mains plug

- 1. The mains plug contains a fuse. For replacement, use only a 13-Amp ASTA-approved (BS1362) fuse.
- 2. The fuse cover must be refitted when replacing the fuse in the moulded plug.
- 3. Do not cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or adapter, or consult your dealer. If nonetheless the mains plug is cut off, remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

Neutral : Live

Do not connect those leads to the earth terminal of a three-pin plug.



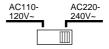
As an ENERGY STAR® Partner, Kenwood Corporation has determined that this products meets the ${\sf ENERGY}\ S{\sf TAR}^{\circledR}\ {\sf guidelines}\ {\sf for\ energy\ efficiency}.$

This product can save energy. Saving energy reduces air pollution and lowers utility bills.

*AC voltage selection

The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

AC voltage selector switch



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

Safety precautions

🗥 Caution: Read this section carefully to ensure safe operation.

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.







CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT RE-MOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE, RE-FER SERVICING TO QUALIFIED SERVICE PERSONNEL.



THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRI-ANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DAN-GEROUS VOL-TAGE" 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 (SERVIC-ING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

Special features

Double cassette decks:

Deck A can be used for playback only and deck B can be used for both playback and recording.

Dolby Noise Reduction:

The Dolby B NR system minimizes the tape hiss noise felt by human ears by processing signals during playback and recording.

Dubbing facility:

This convenient function allows to copy the prerecorded tape in deck A onto a tape in deck B.

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Accessories

Audio cord (2)

System control cord ... (1)





AC plug adaptor.....(1)

(Except for Europe and Australia) For the unit with an European AC plug in areas other than Europe.



Caution on condensation

Condensation (of dew) may occur inside the unit when there is a great difference in temperature between this unit and the outside.

This unit may not function properly if condensation occurs. In this case, leave the unit for a few hours with the power left ON, and restart the operation after the condensation has dried up.

Be specially cautious against condensation in a following circumstance:

When this unit is carried from a place to another across a large difference in temperature, when the humidity in the room where this unit is installed increases, etc.

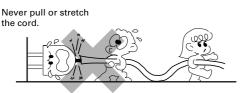
WARNING NOTICE:

IN MOST CASES IT IS AN INFRINGMENT OF COPYRIGHT TO MAKE COPIES OF TAPES OR DISCS WITHOUT THE PERMISSION OF THE COPYRIGHT OWNERS. ANYONE WISHING TO COPY COMMERCIALLY AVAILABLE TAPES OR DISCS SHOULD CONTACT THE MECHANICAL COPYRIGHT PROTECTION SOCIETY LIMITED OR THE PERFORMING RIGHTS SOCIETY LIMITED.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

- Please read all of the safety and operating instructions before operating this appliance. Adhere to all warnings on the appliance and in the instruction manual. Follow all the safety and operating instructions. These safety and operating instructions should be retained for future reference.
- 1. Power sources The appliance should be connected to a power supply only of the type described in the instruction manual or as marked on the appliance. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For appliances intended to operate from battery power, or other sources, refer to the instruction manual.
- 2. 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, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.



- 3. CAUTION Polarization This appliance may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- **4. Ventilation** Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the appliance and to protect it from overheating, and these openings must not be blocked or covered. The appliance should be situated so that its location or position does not interfere with its proper ventilation.

To maintain good ventilation, do not put records or a tablecloth on the appliance. Place the appliance at least 10 cm away from the walls.

Do not use the appliance on a bed, sofa, rug or similar surface that may block the ventilation openings. This appliance should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

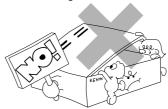


5. Water and moisture – The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

- **6. Temperature** The appliance may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).
- 7. **Heat** The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 8. Electric shock Care should be taken so that objects do not fall and liquid is not spilled into the enclosure through openings. If a metal objects, such as a hair pin or a needle, comes into contact with the inside of this appliance, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this appliance.



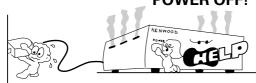
9. Enclosure removal – Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.



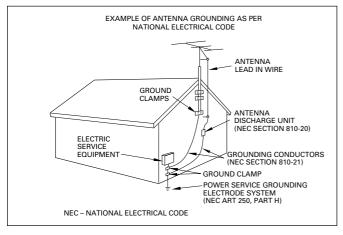
- **10.Magnetic fields** Keep the appliance away from sources of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.
- **11.Cleaning** Unplug this appliance from the wall outlet before cleaning. Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.
- 12. Accessories Do not place this appliance on an unstable cart, stand, tripod, bracket, or table. The appliance may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the appliance. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



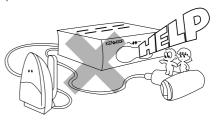
- 13.Lightning For added protection for this appliance during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the appliance due to lightning and power-line surges.
- 14.Abnormal smell If an abnormal smell or smoke is detected, immediately turn the power OFF and unplug the appliance from the wall outlet. Contact your dealer or nearest service center.
 POWER OFF!



- **15.Damage requiring service** The appliance should be serviced by qualified service personnel when:
 - **A.** The power-supply cord or the plug has been damaged.
 - **B.** Objects have fallen, or liquid has been spilled into the appliance.
 - **C.** The appliance has been exposed to rain or water.
 - **D.** The appliance does not appear to operate normally by following the instruction manual. Adjust only those controls that are covered by the instruction manual as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the appliance to its normal operation.
 - **E.** The appliance has been dropped, or the enclosure damaged.
 - **F.** The appliance exhibits a marked change in performance.
- **16.Servicing** The user should not attempt to service the appliance beyond that described in the instruction manual. All other servicing should be referred to qualified service personnel.
- 17. Outdoor antenna grounding If an outside antenna is connected to the appliance, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Article 810 of the National Electrical Code ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.



- **18.Power lines** An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- **19.AC outlets** Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical appliances, such as an iron or toaster, to it to prevent fire or electric shock.



- **20. Overloading** Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- **21. Attachment** Do not use attachments not recommended by the appliance manufacturer as they may cause hazards.
- 22. Replacement parts When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- 23. Safety check Upon completion of any service or repairs to this appliance, ask the service technician to perform safety checks to determine that the appliance is in proper operating condition.

Notes

- 1. Item 3 is not required except for grounded or polarized equipment.
- Item 17 and 18 are not required except for units provided with antenna terminals.
- 3. Item 17 complies with UL in the U.S.A.

Caution:

Do not plug in the power lead until all connections are completed.

Make connections as shown below.

When connecting the related system components, refer also to the instruction manuals of the related components.

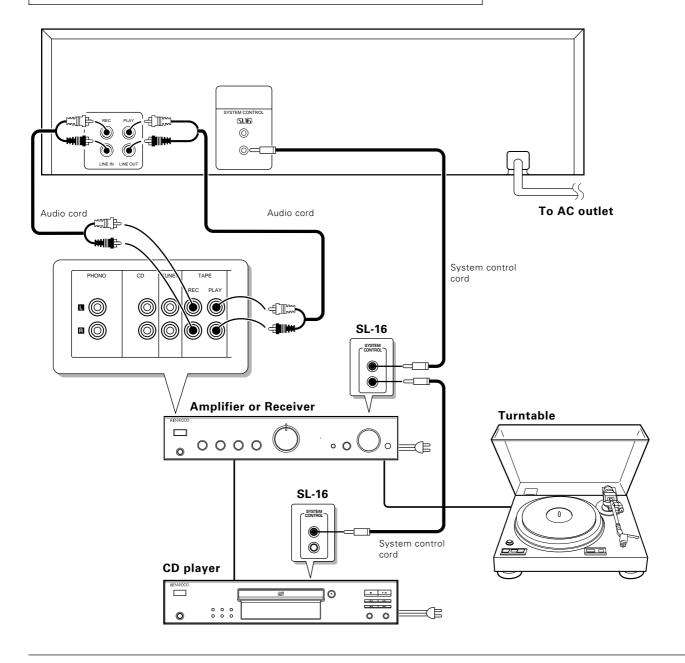
(Except for U.S.A., Canada)

Caution

Be sure to adhere followings. Or proper ventilation will be blocked causing damage or fire hazard.

- Do not place any objects impairing heat radiation onto the top of unit.
- Leave a space around the unit (from the largest outside dimension including projection) equal or greater than, shown below.

Top panel: 50 cm Side panel: 10 cm Back panel: 10 cm



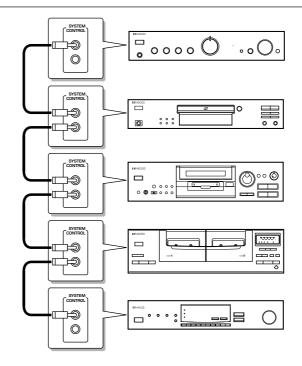


- 1. Connect all cords firmly. If connections are loose, there could be loss of sound or noise produced.
- 2. When plugging and unplugging connection cords, be sure to first remove the power cord from the AC outlet. Plugging/unplugging connection cords without removal of the power cord can cause malfunctions or damage to the unit.
- 3. Do not connect up a power source which is larger than that indicated on the socket at rear of the unit.

SYSTEM CONTROL CONNECTIONS

Connecting system control cords after connecting a KENWOOD audio component system lets you take advantage of convenient system control operations.

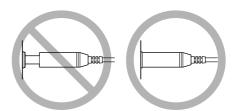
This unit is compatible only with the [SL16] mode. The system control operation is not available if the unit is connected in the [XS-8] connection mode.



• Do this operation after completing all connections. (Ensure that the unit is set to POWER OFF.)



- If your amplifier or receiver does not have a system control terminal, do not connect any system control cords to the system control terminals on the other components.
- Do not connect system control cords to any components other than those specified by Kenwood. It may cause a malfunction and damage your equipment.
- 3. Be sure the system control plugs are inserted all the way in to the system control terminals.



SYSTEM CONTROL OPERATIONS

Remote Control

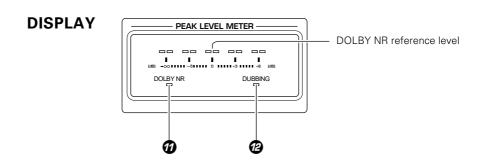
Lets you operate this unit with the system remote control unit supplied with the amplifier or receiver.

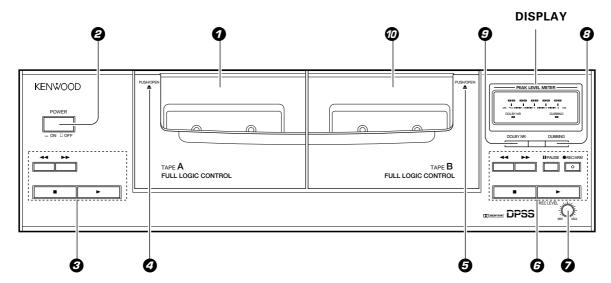
Automatic Operation

Automatically switches the input selector on the amplifier or receiver when you start playback from this unit.

Synchronized Recording

Lets you synchronize recording with the start of playback when recording from CD. See the operating instructions supplied with your cassette deck for details.





O Deck A

Playback-only tape deck.

② POWER switch:

Press to turn power ${\bf _}$ ON and \Box OFF.

② Deck A operation keys

► key:

Play key

⊲⊲ key:

Rewind key. (for fast winding of tape toward the left reel seen from you)

►► kev

Fast forward key (for fast winding of tape toward the right reel seen from you)

■ key:

Stop key.

Cassette holder (Deck A)

Press the area marked "PUSH/OPEN

▲" to load or eject a tape.

G Cassette holder (Deck B)

Press the area marked "PUSH/OPEN **▲**" to load or eject a tape.

6 Deck B operation keys

► key:

Play key.

⊲⊲ key:

Rewind key (for fast winding of tape toward the left reel seen from you)

►► kev:

Fast forward key (for fast winding of tape toward the right reel seen from you)

■ key:

Stop key

● REC/ARM key:

Press in stop mode to start recording or press in record mode to let the recording pause after leaving a nonrecorded blank of 4 seconds.

indicator: (Recording indicator)
IPAUSE key:

Press to let recording pause temporarily.

⊘ REC LEVEL control:

Adjusts the recording level.

3 DUBBING key:

Press to start tape dubbing.

O DOLBY NR key:

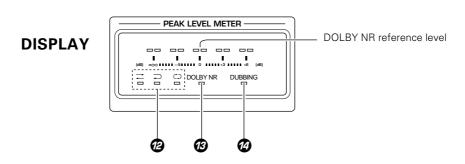
Press to select the Dolby Noise Reduction mode.

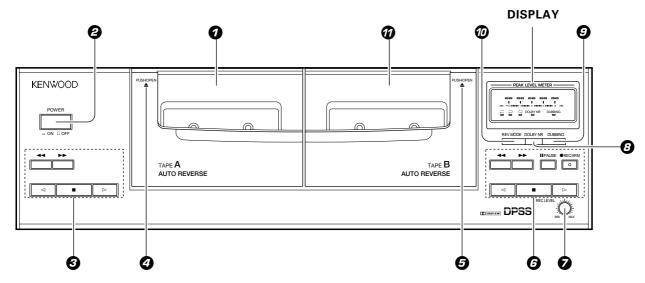
@ Deck B

Tape deck which is capable of both playback and recording.

O DOLBY NR indicator

@ DUBBING indicator





O Deck A

Playback-only tape deck.

② POWER switch:

Press to turn power \square **ON** and \square **OFF**.

O Deck A operation keys / indicators

¬ , ⊳ keys: (Play keys)

¬ → indicators: (direction indicators)

Tapes are played in the directions indicated by their respective indicators.

✓ key

Rewind key (for fast winding of tape toward the left reel seen from you)

►► key:

Fast forward key (for fast winding of tape toward the right reel seen from you)

■ key:

Stop key

Cassette holder (Deck A)

Press the area marked "PUSH/OPEN **_**" to load or eject a tape.

G Cassette holder (Deck B)

Press the area marked "PUSH/OPEN **^**" to load or eject a tape.

6 Deck B operation keys

¬ , ⊳ keys : (Play keys)

¬ → indicators: (direction indicators)
 Tapes are played in the directions indicated by their respective indicators.

⊲⊲ key:

Rewind key (for fast winding of tape toward the left reel seen from you)

►► key

Fast forward key (for fast winding of tape toward the right reel seen from you)

■ key:

Stop key

• REC/ARM key:

Press in stop mode to start recording or press in record mode to let the recording pause after leaving a nonrecorded blank of 4 seconds.

indicator: (Recording indicator) IIPAUSE key:

Press to let recording pause temporarily.

⊘ REC LEVEL control:

Adjusts the recording level.

O DOLBY NR key:

Press to select the Dolby Noise Reduction mode.

DUBBING key:

Press to select the DUBBING mode.

@ REV.MODE key:

Press to select the REVERS mode.

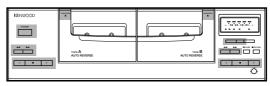
O Deck B

This deck is capable of both playback and recording.

@ Reverse mode indicators

- **3** DOLBY NR indicator
- **②** DUBBING indicator

The figure shows an example for the CT-403 or KXF-W3030



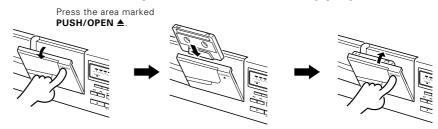
: Keys or controls to be used in this operation

Preparation





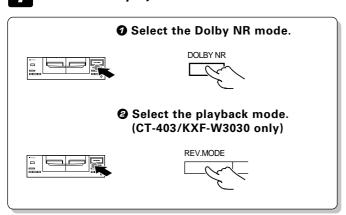
② Load a cassette tape in deck A or B. (Normal playback) Load cassette tapes in both decks. (Relay playback)



- Be sure to remove tape slack before insertion.
- The type of tape, that is, the Normal, High position or Metal position (playback only) is selected automatically.
- •This unit cannot record sound on a Metal tape.
- Be sure to close the cassette holder securely by pushing it.

Normal playback

T Determine the playback conditions.



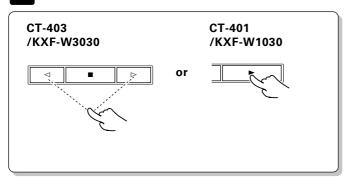
- Set to OFF the Dolby NR key when playing a tape recorded without using Dolby NR.
- Dolby NR on Dolby NR off
 Goes off
- Each press switches the indication.

1) ":Double-side playback which stops tape after having played both sides.

② "⇔" :Playback is endless.

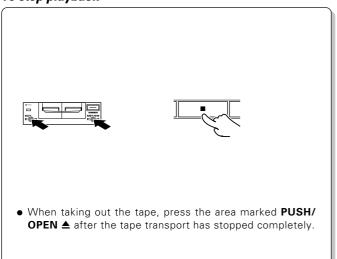
3 "=" :One-way playback which stops tape after having played a single side.

Start playback.

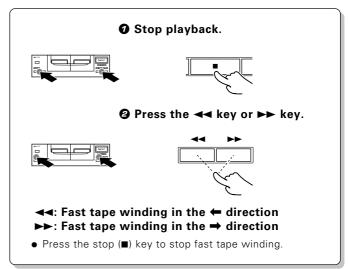


- Tapes are played in the directions indicated by their respective indicators. (CT-403/KXF-W3030)
- Playback stops automatically at the end of tape. (CT-401/KXF-W1030)

To stop playback



Fast Forward and Rewind



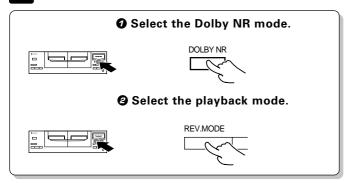
Relay playback (CT-403/KXF-W3030 only)

This function plays back the tapes in both decks A and B continuously and repeatedly.

1 Load cassette tapes in both decks.



2 Determine the playback conditions.



 Set to OFF the Dolby NR key when playing a tape recorded without using Dolby NR.



• Each press switches the indication.

↑ ① "⊃" :Relay playback of two sides of tapes in decks A and B is repeated.
② "⇔" :Relay playback is not available with this setting.

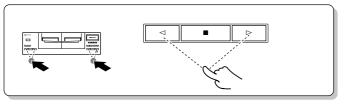
③ "

Relay playback is not available with this setting.③ "

Relay playback of one side only for deck A and deck B,

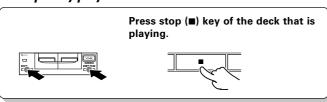
and then playback stops.





- Tapes are played in the directions indicated by their respective indicators on the display.
- The playback starts with the deck the play key of which is pressed.

To Stop relay playback



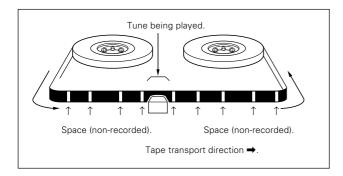
The DPSS (Direct Program Search System) enables the following convenient operations according to the instructions of the operation keys (these operation are however not available on both decks simultaneously). The DPSS functions are based on the detection of non-recorded spaces of 4 seconds or more between tunes.

1. Skip play : By specifying a tune located several tunes beyond (or behind) the tune being played, skips tunes between the current tune and the selected tune and starts playback from the beginning of the

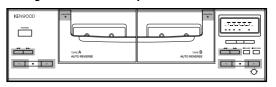
selected tune. Up to 16 tunes can be skipped in Skip Search.

2. Single-tune repeated playback

: One single tune is played back repeatedly up to 16 times.



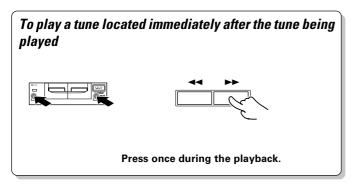
The figure shows an example for the CT-403 or KXF-W3030

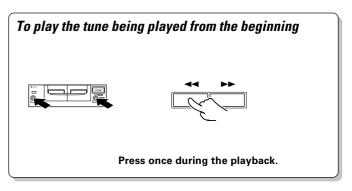


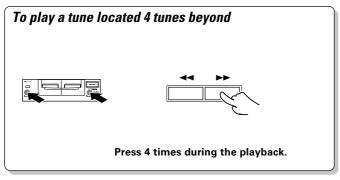
: Keys or controls to be used in this operation

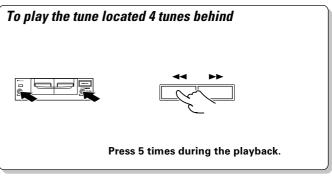
Skip play operation

The example below shows the case in which the direction indicated by the tape transport direction indicator is ►. If the direction indicated by the tape direction indicator is ◄, always press the keys for the opposite directions to those shown in the illustrations below.







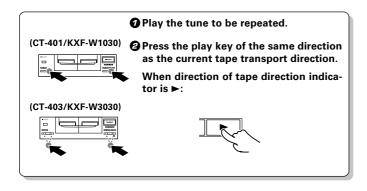


DPSS will not function properly with the following types of tapes.



- Tapes containing spaces of 4 seconds or more, such as conversations and speeches.
- Tape containing extremely low levels or non-recorded spaces in the middle of tunes, such as classical music.
- Tapes containing recording of large noise between tunes.
- Tapes containing spaces of less than 4 seconds between tunes.
- Tapes recorded with low recording level.
- Tapes recorded using Cross-fade recording

Single-tune repeated playback operation

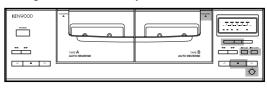


- Normal playback resumes after repeating the same tune for 16 times.
- Press the stop (■) key to stop playback and cancel this operation.

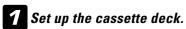
Since this unit is not designed for use with metal tapes, recording on metal tapes cannot be carried out.

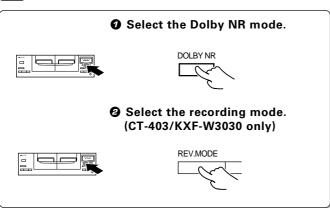
Preparation Insert a tape in deck B.

The figure shows an example for the CT-403 or KXF-W3030



: Keys or controls to be used in this operation





- Press to record with the DOLBY NR.
- Dolby NR on Dolby NR off

Dolby NR on Dolby NR off

DOLBY NR

和

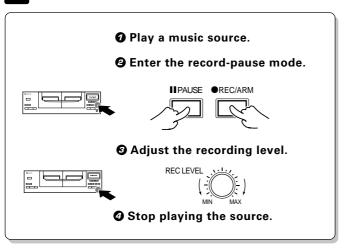
DOLBY NR

TY

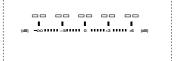
Goes off

- Each press switches the indication.
- ① "Double-side recording which stops tape after having recorded both sides.
 - 2 " $\ \ \text{"}$:Recording stops after having recorded both sides.
 - 3 "==" :One-way recording which stops tape after having recorded a single side.

- **2** Select the source to be recorded.
- **3** Set the recording level.



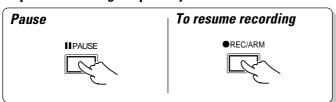
- While pressing the **PAUSE**key, press the **REC/ARM** key.
- Adjust so that segments around the 0 dB segment of the peak level meter light up at times.



4 Start recording.

- Play the music source from the beginning.
 Press the ●REC/ARM key.
 Press once.
- Recording will start.
- The deck enters the stop mode automatically when the tape has been recorded till the end. (CT-401/KXF-W1030)

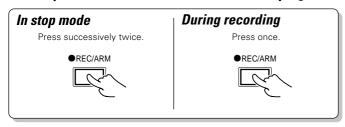
To pause recording temporarily



To stop recording



How to provide non-recorded blanks between programs



• After leaving a non-recorded blank of about 4 seconds, the deck enters the record-pause mode.

Dolby noise reduction system

The Dolby noise reduction system was developed to reduce the tape hiss noise generated during playback.

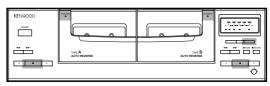
The optimum effect of the Dolby NR system is obtained when the same type NR system is used for both recording and playback. If a different type NR system is used, playback is not performed correctly. Make sure that the same type noise reduction system is used for both recording and playback.

Dolby B NR

The most popular noise reduction system used in home audio components. Usually, Dolby NR system corresponds to B NR.

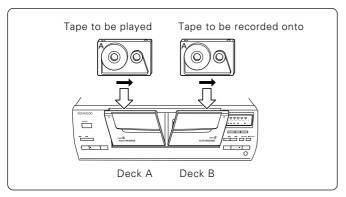
The dubbing refers to the copy of the recorded contents of a tape to another tape (tape in Deck A \rightarrow tape in Deck B).

The figure shows an example for the CT-403 or KXF-W3030

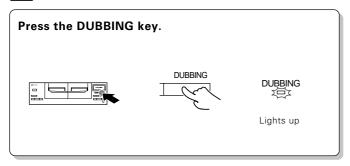


: Keys or controls to be used in this operation

1 Insert tapes in the cassette decks.



2 Start dubbing.

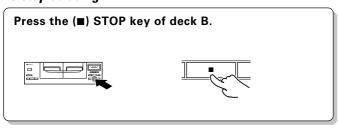


Dubbing will start.



- 1. The recording level cannot be adjusted for dubbing.
- The **DOLBY NR** switch does not function during dubbing. The tape recorded by dubbing features the same NR system as the original tape in Deck A.

To stop dubbing



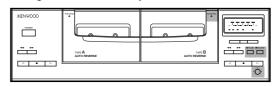
• Both decks A and B enter the stop mode.

Convenient CD recording (deck B only)

By connecting this unit with a KENWOOD amplifier (receiver) with a SYSTEM CONTROL jack and a KENWOOD CD player with a SYSTEM CONTROL jack using system control cords, recording on this unit and playback on the CD player can be started simultaneously.

Since this unit is not designed for recording with metal (TYPE IV) tapes, do not use metal tapes for recording.

The figure shows an example for the CT-403 or KXF-W3030



: Keys or controls to be used in this operation

Preparation

- **1** Complete the connections referring to "System connections".
- 2 Set up the cassette deck
- **-** 14 (Load a disc in the CD player.)

Adjust the recording level.

Play a CD. 2 Set the record-pause mode.

> Press the ►/II key of the CD player.

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•While pressing the PAUSE key, press the REC/ARM key.

3 Adjust the recording recording

"How to record."

Put the CD player in stop mode.

Press (■) STOP key of the CD player.

Set the record-pause mode.



Start playing the CD.

Press the ►/II key of the CD player.

• While pressing the **PAUSE** key, press the **REC/ARM** key.

-14

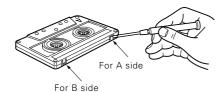
- Synchro recording is not possible when tracks of more than one CD are programmed using a Carrousel type CD player.
- Recording starts at this moment.
- When the CD player has completed playback, the cassette deck stops recording and enters the stop mode

To pause : Press the ►/II key of the CD player. To restart recording: Press the ▶/II key of the CD player. : Press the ■ key of the CD player. To stop

● If the stop (■) key of the cassette deck is pressed, the cassette deck enters the stop mode but the CD player does not stop.

Notes on cassette tape

Safety tab (accidental erasure prevention tab)
After an important recording has been finished, break the safety tab, to prevent the recorded contents from being erased or recorded on accidentally.





To store cassette tapes

Do not store the tapes in a place which is subject to direct sunlight, or near equipment that generates heat. Keep the cassette tapes away from any magnetic field.



When there is slack in the tape

In such a case, insert a pencil into the reel hole and wind the reel hub to remove the slack.



1. Longer tape than 110 minutes cassette tape



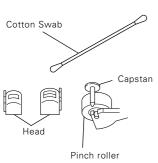
Since longer tape than 110 minutes cassette tape is very thin, the tape could adhere to the pinch roller or be easily cut. It is recommended that these tapes not be used with this unit to prevent possible damage.

2. Endless tapes

Do not use an endless tape, as this could damage the mechanism of the unit.

Maintenance

Cleaning the head section



Cleaning the heads and peripheral components

For maintaining the best condition of the deck and for longer service life, always keep the head (recording / playback / erase), capstan and pinch roller clean. To clean them, capstan perform the following:

- 1. Open the cassette holder.
- Using a cotton swab dipped in alcohol, clean the head (recording / playback / erase), capstan and pinch roller carefully.

Demagnetizing the head

When the recording / playback head is magnetized, the sound quality will be deteriorated. In such a case, demagnetize the head using a commercially available demagnetizer (head eraser).



There are precisely aligned parts around the heads, including the tape guides. When cleaning, pay special attention so as not to apply shock to them.

Cleaning

Unplug this appliance from the wall outlet before cleaning. Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.

Do not use contact cleaners because it could cause a malfunction. Be specially careful against contact cleaners containing oil, for they may deform the plastic components.

In case of difficulty

What appears to be a malfunction may not always be serious. If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

Symptom	Cause	Remedy	
Sounds is not produced when the Play key is pressed.	 The connection cords are connected improperly. The head is dirty. Tape is irregularly wound and hard to take up. A non-recorded tape is being played. 	 Connect the cords properly referring to "System connections". Clean the head referring to "Cleaning the head section". Replace the tape. Play a recorded tape. 	+ 6 - 18
The deck does not work when an operation key is pressed.	 The cassette holder is not closed completely. The operation key was pressed immediately after closing the cassette holder. The operation key was pressed within less than 4 seconds after the power was turned on. Tape is not inserted. Tape is irregularly wound and hard to take up. Tape has been rewound to a reel. 	 Close the cassette holder completely. Press the desired operation key in a few seconds after closing the cassette holder. Press the desired operation key in more than 4 seconds after turning the power on. Insert a tape. Replace the tape. Re-insert the tape to play the other side. 	
The dubbing on Deck A and Deck B ends at different timing.	This is due to the difference in tape length or to the characteristics of the cassette deck mechanisms.	A small time difference is not regarded as a failure.	
The cassette holder does not open when the area marked "PUSH/OPEN (♠)" is pressed.	 The area marked "PUSH/OPEN (♠)" is pressed during recording. 	Press in the Stop mode.	
Sound is hoarse, or high frequencies are not audible.	The head is dirty.The tape is stretched or wrinkled.	 Clean the head referring to "Cleaning the head section". Replace the tape. 	- 18
Sound is distorted.	The recording level was too high.A tape recorded with distorted sound is being played.	 Adjust the recording level referring to "How to record". Replace the tape. 	+ 14
Recording is not initiated when the REC/ARM (●) key is pressed.	 The protection tab on the cassette has been broken. The cassette holder is not closed completely. The recording level is set to the minimum position. The TAPE input selector is selected on the amplifier. Tape has been fully wound to a reel. 	 Use a cassette with unbroken tab or close the hole. Close the cassette holder completely. Adjust the recording level referring to "How to record". Press the input selector key of the source to be recorded. Change the tape transport direction of Deck or insert the tape inversely. 	→ [14]
Noise level is high.	 The head is magnetized. External noise is induced. The recording level was too low. A tape recorded with Dolby NR ON is being played with Dolby NR OFF. 	 Demagnetize the head referring to "Cleaning the head section". Install the system apart from other electrical appliances and TV set. Adjust the recording level referring to "How to record". Press the DOLBY NR switch to ON. 	- [18]
Sound is vibrating.	The capstans or pinch rollers are dirty.Tape is irregularly wound.	 Clean the head referring to "Cleaning the head section". Wind the tape regularly by fast forwarding, rewinding or playing it fully from one reel to another. 	→ 18



^{1.} With some tapes, a squeaky noise is produced when the tape is stopped automatically. This is due to the tape protection function, and not a malfunction

Track Syste	Till Tilack, 2 chamilers	tereo
Recording	System AC bias (Frequency	/: 105 kHz)
Heads	A DECK	
	Playback heads	1
	B DECK	
	Playback / recording h	eads 1
	Erasing head	
Motors	_	
Wow and F	lutter	
Frequency		
	pe 30 Hz to	13.000 Hz. ± 3 dE
	ape30 Hz to	
Signal to N	=	,,,,,,,
Dolby NR	OFF	57 dE
	NR ON (3rd, H.D., 3 %, TYPE	
-	tivity / Impedance	
•		122.8 mV / 54 kΩ
	el / Impedance	
	Γ	775 mV / 1.1 kΩ
[General]		
	sumption	14 W
Dimensions		440mm (17-5/16"
	Н	-
	D:	
Weight (Ne	t)	
	-,	(0.0 10



- 1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
- 2. The full performance may not be exhibited in extremely coud location (under a water-freezing temperature).

KENWOOD

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

ModelSerial Number	
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