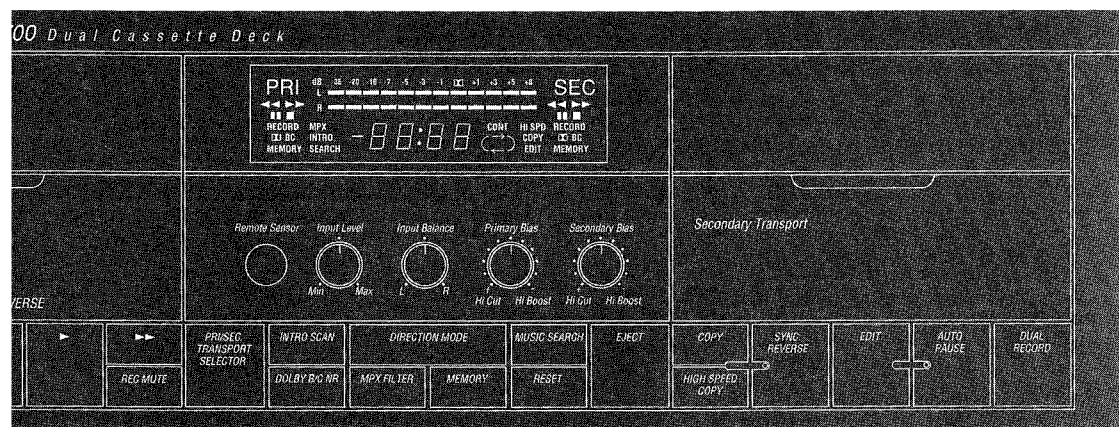
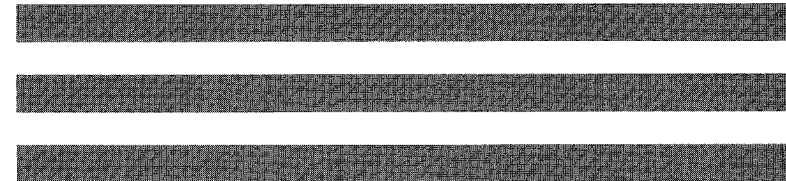


# DC5300/DC5500/DC5700



Dual Cassette Deck



**harman/kardon**

# OWNER'S MANUAL

# DC5300/DC5500/DC5700 INTRODUCTION



**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.



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

**CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**ATTENTION :** POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

Thank you for choosing a Harman Kardon dual cassette deck. And congratulations! Your new unit is an exceptionally well-engineered product that will give you years of superb performance.

The special features of this unit include:

#### ■ Dual Mode Copying

The unit makes high quality, better sounding cassette copies in either "real time" or at high speed.

#### ■ Unique Operating Software

Operating software designed with the user in mind offers simple, streamlined unit operations.

#### ■ Auto Tape Sensor

The unit determines the type of tape in use and sets Bias/Equalization circuitry automatically.

#### ■ Quick Auto Reverse

While in Record mode, the unit senses the leader at the end of the tape and automatically reverses the tape direction, permitting extended recording times.

#### ■ Linear Time Counter

Tape position is indicated in minutes and seconds.

#### ■ Discrete Circuitry

For maximum design flexibility and highest possible performance, the playback circuitry has been designed using discrete electronic components, not off-the-shelf integrated circuits.

#### ■ Large Fluorescent Display

Function settings and signal levels are indicated in bright, clear alphanumeric and an easy-to-read format.

#### ■ Ergonomic Design

Controls are engineered and positioned for simple, error-free recording and playback.

#### ■ Intro Scan

(DC5500 and DC5700 only) At a single touch, the unit automatically previews a pre-recorded tape, playing the first 15 seconds of each segment, then rapidly advancing to the next.

#### ■ Music Search


(DC5500 and DC5700 only) Music Search feature rapidly locates the start of any desired segment on a pre-recorded tape.

#### ■ Remote Control

(DC5500 and DC5700 only.) Convenient unit includes commonly used functions, as well as special features such as Intro Scan and Music Search.

#### ■ Dolby\* HX PRO

(DC5500 and DC5700 only) Special recording circuitry automatically monitors signal levels and adjusts bias in the presence of momentary high frequency peaks. This allows you to record at higher input levels (for better signal quality) without distortion. Dolby HX Pro operates automatically whenever recordings are made, and the resulting higher-fidelity tape can be played back on any cassette deck.

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





# ***GENERAL INSTRUCTIONS***

## **Use 120-volt 60-cycle AC only.**

Connecting the unit to an outlet supplying a higher voltage may create a fire hazard.

## **Handle the Power Cord Gently.**

- To disconnect the plug from the AC outlet, pull on the plug itself, not on the cord. Pulling the cord may break the wire.
- Disconnect the plug from the AC outlet whenever the unit is to be left unused for an extended period of time.
- Do not place furniture or other heavy objects on the cord, and avoid dropping heavy objects on it. Also, do not make a knot in the cord; this can damage it and cause a fire hazard.

## **Place the cassette deck on a firm and level surface.**

Avoid installing it:

- Outdoors;
- In moist or humid places;
- Close to heating equipment or in places exposed to direct sunlight;
- In a direct draft from an air conditioner or in other very cold locations;
- In places subject to excessive vibration or dust;
- In poorly ventilated areas.

## **Moving the Unit**

Before moving the unit, be sure to unplug the power cord from the AC outlet and disconnect all wires to other stereo components.

## **Cleaning**


Remove dust by wiping the unit with a soft, dry cloth. If necessary, use a soft cloth lightly dampened with mild soapy water; then wipe with a dry cloth. Never use benzine, thinner, alcohol, or other volatile agents, and avoid spraying insecticides near the unit.

## **Service**

Your dual cassette deck should be serviced by authorized Harman Kardon service personnel when:

- The plug or power cord has been damaged;
- Objects have fallen into the unit;
- Liquid has been spilled into the unit;
- The unit has been exposed to rain;
- The unit does not operate normally;
- The unit has been dropped or the cabinet has been damaged.

Please do not attempt to service your dual cassette deck beyond the troubleshooting suggestions in this manual. All other service should be referred to authorized Harman Kardon service personnel.



# INSTALLATION

## Packaging

Save all packing material. It is essential for shipping, should you move or in the event the unit ever needs repair.

## Placement

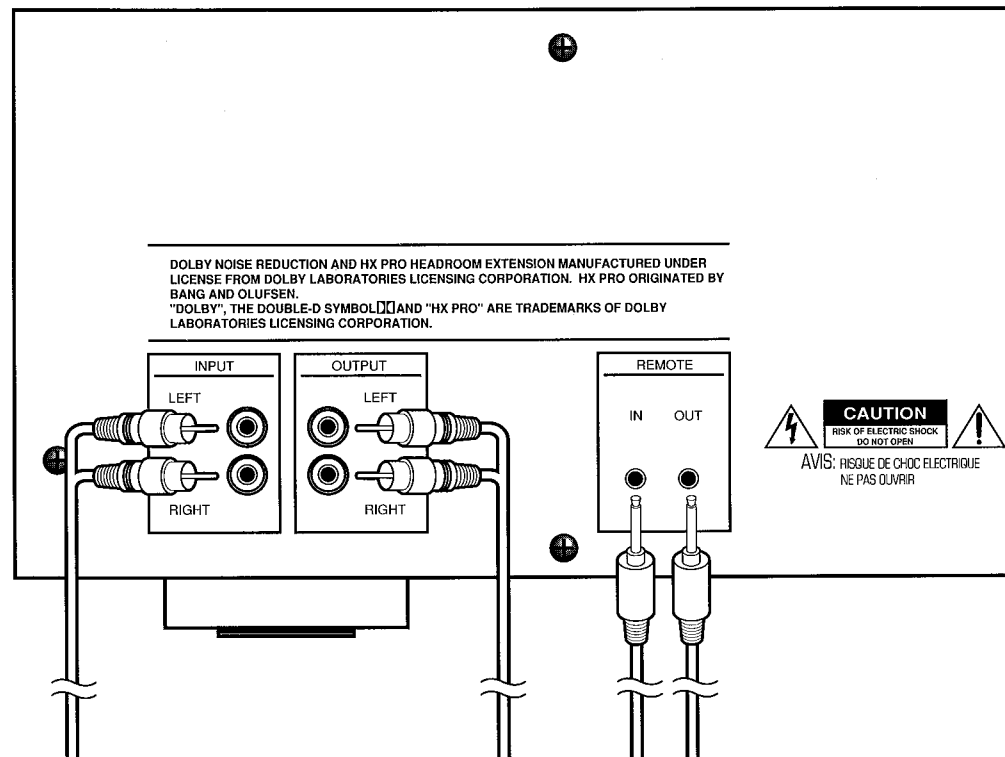
The unit may be placed on top or beneath other stereo components, so long as its placement meets the cooling requirements of the component beneath it.

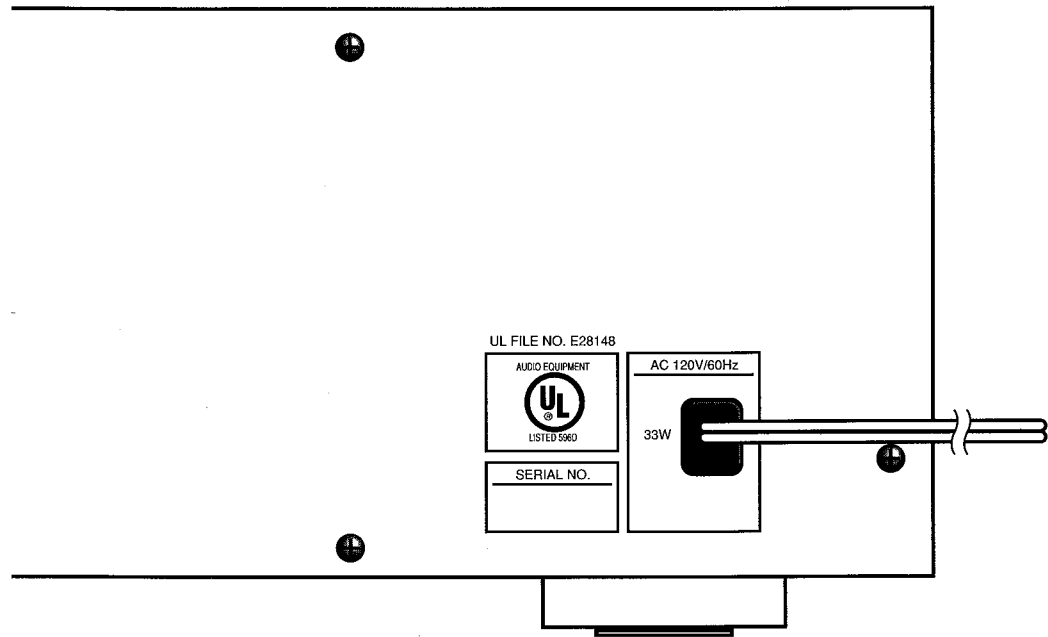
## Hook-up

1. Make sure all stereo components are turned off.
2. Use the cable provided to connect the left and right Input jacks of the cassette deck to the "Tape Monitor Output" jacks (sometimes labeled "Record") of your pre-amplifier, integrated amplifier, or receiver.
3. Connect the left and right Output jacks on the deck to the "Tape Input" jacks (sometimes labeled "Play" or "Monitor") on your pre-amplifier, integrated amplifier, or receiver.

NOTE: If you are using an equalizer and/or other external signal processing components that are currently connected to the Tape Monitor loop of your receiver/pre-amp/integrated amplifier, you have two choices:

1. Connect the deck to the Tape Monitor loop provided on the last outboard component; or
2. If your receiver/pre-amp/integrated amplifier has two Tape Monitor loops, you may connect the cassette deck to the unused loop. (In this case, the cassette deck will be unaffected by the external signal processing components.)



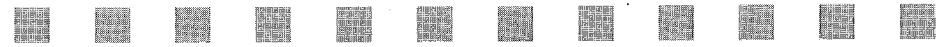


### Remote Control Rear Panel Jacks

1. If you wish to control your deck through an external infrared remote sensor: connect the wire from the remote sensor to the "Remote Input" jack on the deck.\*
2. To control the deck, you may use the remote control unit supplied with your cassette deck. Alternatively, you may use a universal remote control unit, such as Harman Kardon's Masterworks (TM), which can also control other components, such as TV's, VCR's, receivers, and CD players. Masterworks is available from your Harman Kardon dealer. DC5300 does not come with its own remote control. Also, the remote control unit included with some Harman Kardon receivers will control some of the dual deck functions. Consult your Harman Kardon dealer for more information.
3. Connection to other stereo components.
  - a.) To control additional components through the external sensor: run a control wire from the "Remote Output" jack on your deck to the "Remote Input" jack of another component. Continue this process to include multiple components.\*
  - b.) Even if you do not use an external sensor: you may still wish to connect your deck to another component, if you have one with a "Remote Input" jack but with no other built-in remote sensor. In this case, you may use the built-in sensor in your deck to control the other component.\*

\* NOTE: Not all components are compatible. However, it will not hurt to experiment.

# CONTROLS



**Direction Mode**  
Selects one way, reverse, or continuous transport mode.

**Input Level**  
Adjusts recording level.

**Power Switch**  
Press to turn unit on/off.

**PRI/SEC Transport Selector**  
Selects which transport (either Primary or Secondary) is to be operated by the transport controls.

**Intro Scan**  
(DC5500 & DC5700 only.)  
Previews each segment on a pre-recorded tape.

**Stop**  
Stops tape movement.

**Reverse Play**  
Begins playback or recording in reverse direction.

**Rewind**  
Rapidly rewinds tape.

**Eject**  
Press to load/remove tape cassette in Primary transport.

**Rec/Pause**  
Puts cassette deck in Record-ready or Pause mode.

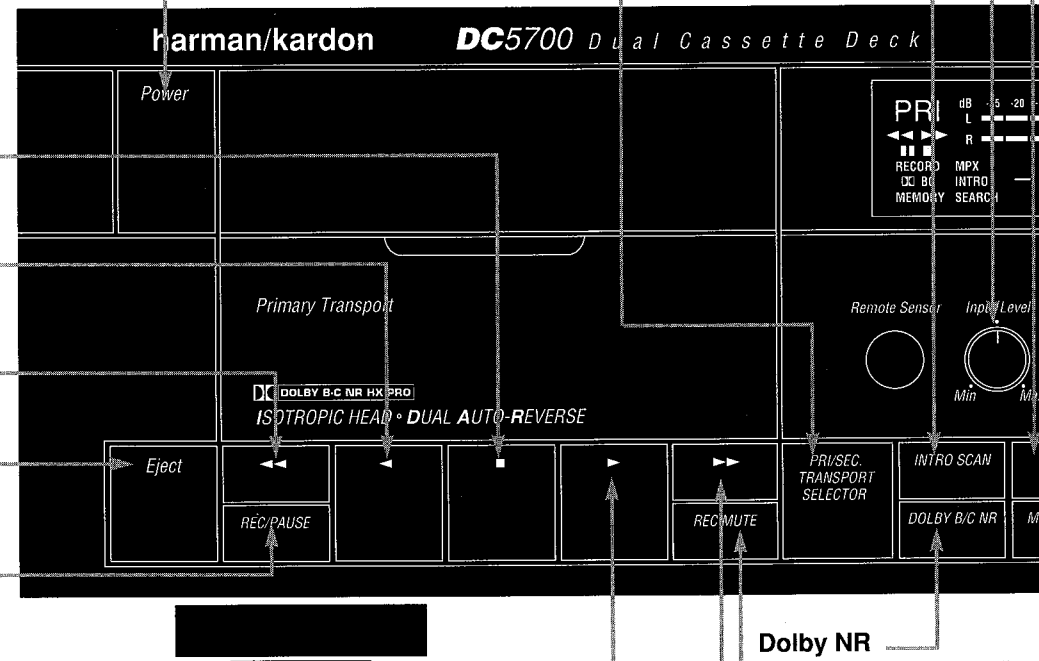
**Play**  
Begins playback or recording.

**Fast Forward**  
Rapidly advances tape.

**Rec Mute**  
Inserts blank space when recording.

**Dolby NR**  
Selects Dolby on/off, Dolby B mode, or Dolby C mode.

**MPX Filter**  
Press when using Dolby noise reduction while recording FM stereo broadcasts.



**Input Balance**

Adjusts recording balance of left and right channels.

**Primary Bias**

Adjust when recording.

**Music Search**

(DC5500 & DC5700 only.) Preset Music Search for a maximum of 15 tracks.

**Secondary Bias**

(DC5700 only.) Adjust when recording.

**Copy**

Press to begin automatic copying procedure.

**Hi-Speed Copy**

Press to begin automatic high speed copying procedure.

**Sync Reverse**

Activates automatic synchronized reverse copying in Copy and Hi-Speed Copy modes.

**Dual Record**

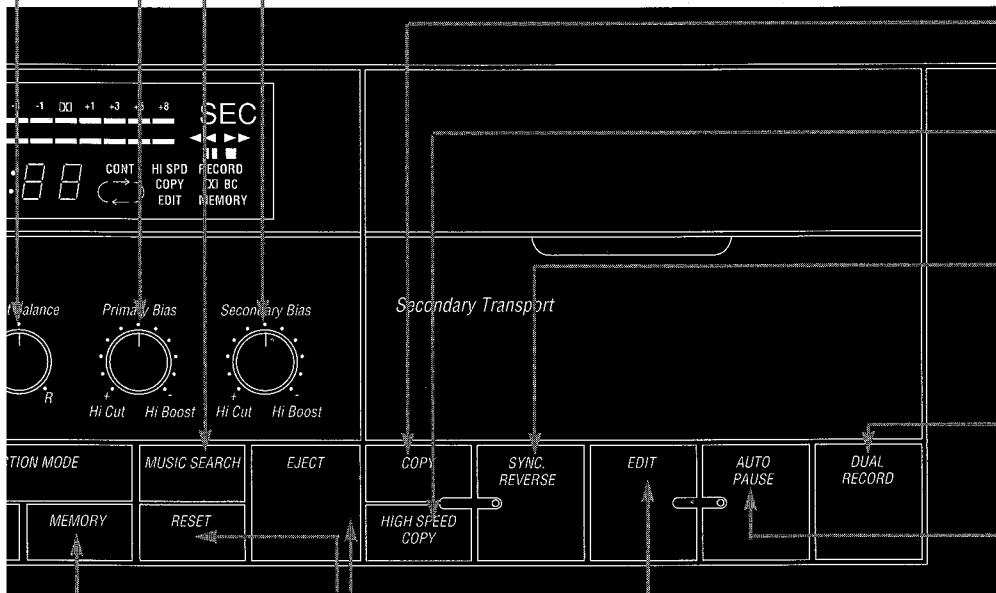
(DC5700 only.) Press to activate Dual Record.

**Auto Pause**

(DC5500 & DC5700 only.) Press to activate Auto Pause when in Edit Mode.

**Edit**

Press to begin Edit mode.



**Memory**

Press on: when ◀◀ is pressed, tape rewinds to approximately 00:00 on Counter.

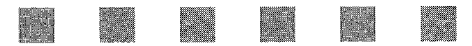
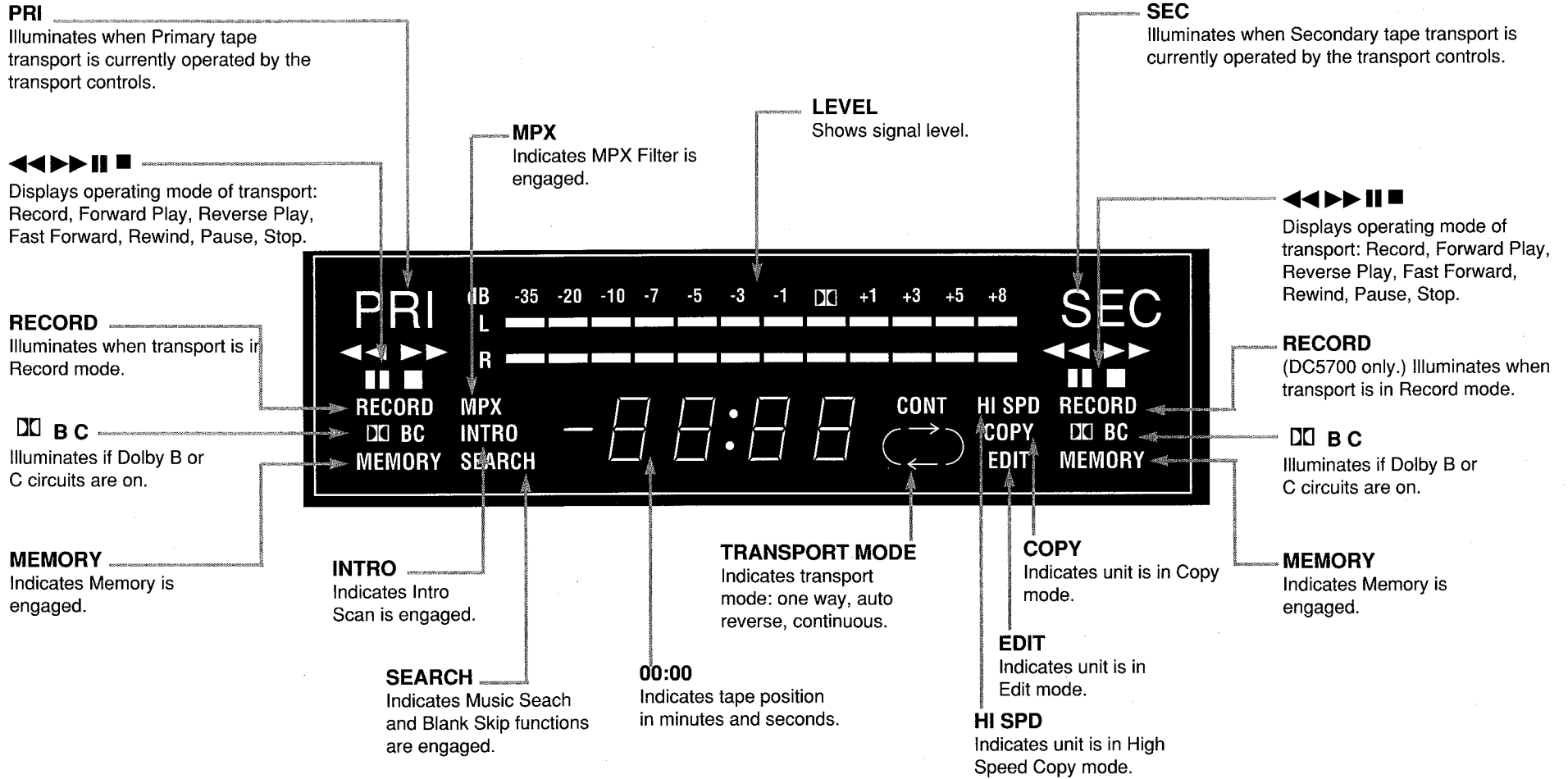
**Reset**

Resets Counter to 00:00.

**Eject**

Press to load/remove tape cassette in Secondary transport.

# DISPLAYS





# REMOTE CONTROL

(DC5500 & DC5700 only.) The control unit includes buttons that function the same way as the corresponding keys on the cassette deck.

## Display

The **Display** button does not appear on the deck itself. It is used to control the fluorescent display on the deck. Its default setting leaves the display illuminated on the deck. Press the button once and all settings extinguish, except the indicator for the transport that is currently in use and its operation. Press the button again and all indicators are extinguished. Press the button a third time and the display returns to default mode.

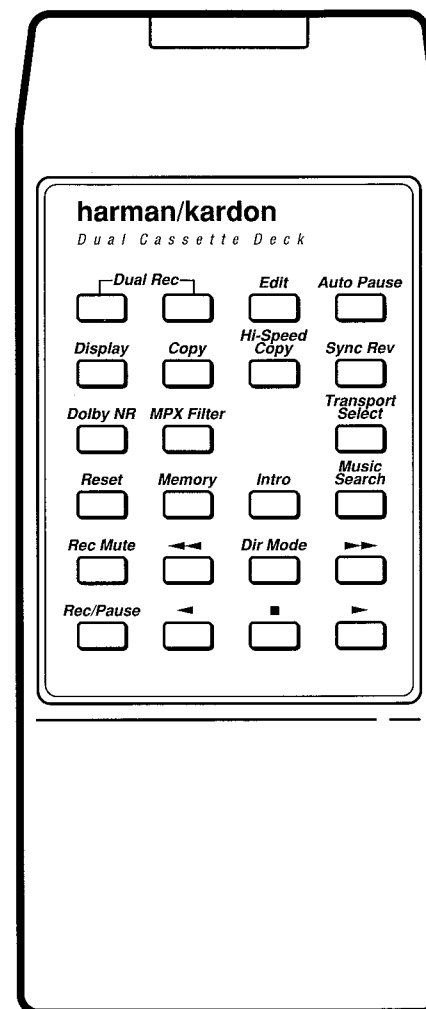
## Dual Rec

The two buttons marked **Dual Rec** are pushed simultaneously to begin the Dual Record function, available on the DC5700 only.

## Operation

The control unit operates effectively within 7 meters (23 feet) and within an angle of 30-degrees from the cassette deck. Using the control unit near fluorescent lights may shorten this range, as will any dust or dirt that is allowed to accumulate on the front end of the remote control, or the "Remote Sensor" area of your deck. Also avoid blocking the line of sight between cassette deck and remote.

The control unit is powered by two AA batteries, included with your cassette deck. When you replace weak batteries, replace both at the same time. When the remote is to be unused for an extended period, remove the batteries to prevent damage from corrosion.



# BASIC OPERATING INSTRUCTIONS

## Operating the Unit as a Single Cassette Deck

When operating the unit as a single cassette deck, the transport switches operate only one transport at a time. When the unit is first turned on, the Primary Transport is automatically selected as the "current" transport, indicated by the illumination of **PRI** in the display. The Secondary Transport may be selected manually by pressing the Transport Selector button, at which time **SEC** is illuminated in the display.

**NOTE:** If there is a tape in the secondary transport and none in the primary transport when the unit is first turned on, the secondary transport is selected as "current" and **SEC** is illuminated in the display.

## Inserting a Tape

1. Check cassette tape for excessive slack. If necessary, insert a pencil into one of the cassette hubs and rotate to take up slack.
2. If using the Primary Transport, press Eject on the Primary Transport.
3. Insert cassette, tape side down, and close compartment door.

**NOTE:** The cassette deck determines the type of tape in use and sets Bias/Equalization circuitry automatically.

## Playing a Tape


1. Determine if the tape was recorded using Dolby B or C Noise Reduction and press the Dolby B/C NR button until the correct setting is displayed.
2. Press ► (Forward Play) to play the side of the tape facing the front. Press ◀ (Reverse Play) to play the side of the tape facing the rear.
3. To pause playing, press **REC/PAUSE**. To start playing forward again, press ► (Forward Play) again. To change play direction and stay in the Pause mode, press ◀ (Reverse Play).
4. To stop playing, press ■.

**NOTE:** In Auto Reverse mode, play direction is automatically reversed when leader tape is detected. Press the Direction Mode button until the display shows (◀▶). Auto Reverse will keep the unit playing until each side of the tape is played eight times. When in normal, one-way play mode, indicated by ◀▶, the transport stops when the tape reaches the end of the side.

## Recording a Tape

1. Set Bias fine Trim knob to the center and set Dolby NR setting as desired for this recording.
2. If recording an FM stereo broadcast and using Dolby Noise Reduction, turn on the MPX Filter.
3. Press **REC/PAUSE** to put the unit in Record Pause mode.
4. Play a louder segment of the material to be recorded and check the signal level indicated by the bars marked **L** and **R** on the display. If levels are unequal, correct the imbalance by turning the Input Balance knob.
5. Set the record level by turning the **Input Level** knob until the loudest material illuminates the bars at +3dB.
6. Return to the beginning of the material to be recorded.
7. Press ► (Forward Play) to begin recording on the side of the tape facing the front. Press ◀ (Reverse Play) to begin recording on the side of the tape facing the rear.



- 
8. To pause recording, press **REC/PAUSE**. To start recording forward again, press ► (Forward Play) again. To change record direction and stay in the Pause mode, press ◀ (Reverse Play).
  9. To stop recording, press ■.
  10. You may also stop recording by pressing the **Rec Mute** button. This records four seconds of silence and then returns the deck to the Record Pause mode for recording additional selections.

NOTE: In Auto Reverse mode, recording direction is automatically reversed when leader tape is detected. Press the Direction Mode button until the display shows (↻). Auto Reverse will record both sides of the tape and stop.

When in normal, one-way play mode, indicated by ⇨, the transport shuts off when the tape reaches the end of the side.

### Copying a Tape

The Copy function automatically copies the full contents of one tape onto another with the push of a single button.

1. Place the recorded tape in the Secondary Transport and the blank tape in the Primary Transport.
2. Select the correct type of Dolby Noise Reduction. For the DC5700 only, the NR type for the Primary Transport must be set independently from the Secondary Transport. Use the Pri/Sec Transport selector button to enable independent settings.
3. Press the Copy button. Copy blinks in the Display, the Secondary Transport automatically becomes current, and both tapes are rewound to their beginning. At high speed, both tapes are then brought to the end of their leaders. The Primary Transport goes

into the Record Pause mode and the Secondary Transport goes into the Play Pause mode. When both Transports are ready, Copy mode begins, indicated by a steadily illuminated Copy in the display.

4. To stop Copy mode, press ■. The Primary Transport automatically becomes current, and the status of the Secondary Transport is kept in memory until power is turned off.

NOTE: The unit will automatically copy both sides of a tape in this manner if the direction mode indicator displays (↻) when Copy is pressed. If the direction mode indicator displays ⇨, Copy is automatically turned off when either tape reaches its end.

### Hi Speed Copy

The Hi Speed Copy function copies a tape at twice normal speed with exceptionally good sonic quality.

Follow the instructions for Copy mode; however, after placing the recorded and blank tapes in their appropriate transports, press **Hi Speed Copy**.



# ADVANCED OPERATIONS



## Operating the Unit as a Dual Cassette Deck

Operating the unit as a dual cassette deck allows continuous play between two different cassette tapes. It also allows copying between tapes at "real time" or high speed.

### Continuous Play

1. With a pre-recorded tape in each transport, press the **Pri/Sec Transport Selector** button to select the Primary Transport as current.
2. Press **Direction Mode** until both **CONT** and **↔** are illuminated in the Display.
3. Select the correct type of Dolby Noise Reduction. For the DC5700 only, the NR type for the Primary Transport may be set independently from the Secondary Transport. Use the **Pri/Sec Transport selector** button to enable independent settings.

4. Press **▶** (Forward Play) to begin Continuous Play with the front side of the tape in the Primary Transport. The unit will play both sides of the tape in the Primary Transport, followed by both sides of the tape in the Secondary Transport.
5. Press **◀** (Reverse Play) to begin Continuous Play with the rear side of the tape in the Primary Transport. The unit will play the rear side of the tape in the Primary Transport, followed by both sides of the tape in the Secondary Transport, and then the front side of the tape in the Primary Transport.
6. To play more than two tapes continuously, you may exchange the tape that is not playing.

**NOTE:** Continuous Play will keep the unit playing until each side of each tape is played eight times.

## Continuous Record (DC5700 only.)

1. With a tape in each transport, press the **Pri/Sec Transport Selector** button to select the Primary Transport as current.
2. Press **Direction Mode** until **↔** is illuminated in the Display.
3. Select the correct type of Dolby Noise Reduction in either **PRI** or **SEC** mode. The NR type for the Primary Transport must be set independently from the Secondary Transport.
4. Press **Rec/Pause** to place the unit in Record Pause mode.
5. Press **▶** (Forward Play) to begin Continuous Record on the front side of the tape in the Primary Transport. The unit will record both sides of the tape in the Primary Transport, followed by both sides of the tape in the Secondary Transport.

6. Press **◀** (Reverse Play) to begin Continuous Record on the rear side of the tape in the Primary Transport. The unit will record the rear side of the tape in the Primary Transport, followed by both sides of the tape in the Secondary Transport.

**NOTE:** Continuous Record automatically stops when the rear side of the tape in the secondary transport is recorded.

### Using Sync Reverse

When making "real time" or high speed copies, you may want to use the Sync Reverse mode. Simply press the **Sync Reverse** button after choosing **Copy** or **Hi Speed Copy**.

In Sync Reverse, when the leader at the end of the recorded tape is detected, the Secondary Transport goes into Play Pause, while the Primary Transport goes into Record Mute mode. At the point the blank tape reaches its leader, the direction of both Transports is reversed and recording continues.

If the leader of the blank tape is detected first, the Primary Transport goes into Record Pause, while the Secondary Transport continues to play. At the point the recorded tape reaches its leader, the direction of both Transports is reversed and recording continues.

Copy mode is automatically stopped when the second side of either tape reaches its end.

### **Edit**

Edit mode allows you to make a recording of selections from more than one recorded tape.

1. Place the recorded tape in the Secondary Transport and the blank tape in the Primary Transport.
2. Press **Edit**. The Secondary Transport becomes current and dubbing begins immediately.
3. To record 4 seconds of silence on the blank tape in Edit mode, press **Rec Mute**. After the silence is recorded, the unit goes into Edit Ready mode.
4. To begin copying again in Edit mode, press **Edit**.
5. To turn off Edit mode, press **■**.

**NOTE:** In Edit mode, each tape is automatically reversed separately when the leader is detected if the direction mode indicator displays (↺). If the direction mode indicator displays ↻, Edit mode is automatically turned off when either tape reaches its end.

### **Auto Pause in Edit Mode**

(DC5500 and DC5700 only.) When only one track from a Source tape is to be recorded, use the Auto Pause feature. Simply press Auto Pause while in the Edit mode and both transports will automatically be paused at the end of every track recorded.

### **Blank Skip Edit**

(DC5500 and DC5700 only.) This function is active when Search is active in the Edit mode. If there is no sound on the Source tape for approximately 10 seconds, the Secondary Transport goes into Search mode for the next track, and the Primary Transport rewinds the blank tape to shrink the blank spot down to approximately four seconds.

When the next track is found in the Secondary Transport, both transports return to the Edit mode to continue dubbing.

### **Music Search in Edit Mode**

(DC5500 and DC5700 only.) Music Search in Edit mode is accomplished in the same manner as in Single Cassette Deck operation. However, when the desired track has been detected, the Secondary Transport goes into Play Pause. To resume Edit mode at that point, press **Edit**.

### **Dual Record**

(DC5700 only.) Dual Record allows you to make two simultaneous copies of the same program present at the unit's inputs.

1. Place blank tapes in both the Primary and the Secondary Transports.
2. Press **Dual Rec** to begin Dual Recording.
3. To create a 4-second silence in both tapes, press **Rec Mute**.
4. To stop recording in the Secondary Transport only, press **■** in Secondary Transport mode. Use the Pri/Sec Transport Selector to enter the secondary mode, if necessary.
5. To turn off Dual Record mode, press **■** in Primary Transport mode.

### **Setting Bias Fine Trim**

The Bias Fine Trim control manipulates the amount of high frequencies recorded and has no effect in the Play mode. When in doubt, position the control to its center detent position. Turning it clockwise increases the amount of high frequencies recorded. Turning it counter-clockwise reduces the amount.

The user should record a short section of tape, rewind it, and play it back as a comparison to the original sound quality. Continue to increase or decrease the bias setting until the resulting sound is optimum.

### **Memory Rewind**

The Linear Time Counter allows you to rewind rapidly to any desired point in a tape and either play the tape or stop the transport. The Counter indicates approximate tape position in minutes and seconds. (Elapsed time is maintained in Fast Forward and Rewind.)

# ADVANCED OPERATIONS

1. Press **Reset** at the desired return point, setting the Tape Counter display to **00:00**.
2. Press **Memory** button and **Memory** illuminates in the Display.
3. When you wish to return to and stop at the Memory Rewind position on the side of the tape facing front, press **◀◀** (Rewind). For the side of the tape facing rear, press **▶▶** (Fast Forward).
4. When you wish to begin play from the Memory Rewind position on the side of the tape facing front, press **▶** (Forward Play) while holding down the **◀◀** (Rewind) button. For the side of the tape facing rear, press **◀** (Reverse Play) while holding down the **▶▶** (Fast Forward) button.

NOTE: When the Counter is reset to **00:00** at the beginning of a cassette, the approximate time remaining can be determined by subtracting the counter reading from the total tape time. Accuracy is typically within one minute of the tape's actual running time.

## Music Search

(DC5500 & DC5700 only.)

The unit can quickly locate the start of any desired segment on a pre-recorded tape.

1. Press **Music Search; SEARCH** illuminates in the display.
2. To find the beginning of the next selection, press **▶▶** while in Forward Play or **◀◀** while in Reverse Play. **P 01** is displayed, the unit scans ahead rapidly, and returns to normal play at the next selection.
3. To skip ahead 2 or more selections, press **◀◀** while in Forward Play up to 15 times. The Display will show the number of selections you wish to skip (**P-02** up to **P-15**), and will count down as each selection is skipped until it reaches **P-00**. Play then begins.
4. To find the beginning of the current selection, press **◀◀** while in Forward Play or **▶▶** while in Reverse Play. **P 00** is displayed, the unit scans back rapidly, and returns to normal play at the next selection. Continue pressing **◀◀** or **▶▶** to locate the beginning of previous selections (designated **P-01**, **P-02**, etc.).

## Blank Skip

(DC5500 & DC5700 only.)

Press the **Music Search** button. If the unit senses no sound for approximately 10 seconds in Play mode, it automatically goes into Search mode until it finds the next track. Then it returns to Play mode.

## Intro Scan

(DC5500 & DC5700 only.)

At a single touch, the unit automatically previews a pre-recorded tape, playing the first 15 seconds of each segment, then rapidly advancing to the next.

1. Press **Intro Scan; INTRO** illuminates in the display. The unit scans the tape at high speed, locates the beginning of recorded material, and plays for 15 seconds. The tape is then advanced to the beginning of each successive recorded segment or track and played for 15 seconds before automatically advancing to the next track.

2. While in Intro Scan, you may skip to the next track or go back to the previous track by pressing **▶▶** or **◀◀**.
3. Press **▶** or **◀** during any 15-second play segment to go directly into play.
4. To stop Intro Scan, press **■**.

NOTE: Intro Scan will automatically preview both sides of a tape in this manner if the direction mode indicator displays either **(↔)** or **(↔)** when Intro Scan is selected. If the direction mode indicator displays **↔**, Intro Scan is automatically turned off when one side of the tape has been scanned.





# *MAINTENANCE*

## **Cleaning the Tape Heads**

Tape heads must be cleaned periodically to remove tape particles which gradually build up on the heads, impairing sound quality and increasing wear on tapes. Heads may be cleaned in either of two ways:

1. Slightly dampen a cotton swab in isopropyl alcohol and gently rub the surfaces of each tape head. Use a second dampened swab to clean other surfaces coated with tape material. Repeat this cleaning every 30 tapes.
2. Use a tape head cleaning kit that comes in the form of a tape cassette and is simply inserted into the deck. Follow the instructions included with the kit.

## **Demagnetization**

Tape heads and other internal parts gradually pick up magnetic fields that can add noise to your tape and even partially erase them. To prevent this problem, tape heads should be periodically demagnetized, using either of two devices:

1. A battery-powered demagnetizer is easiest to use. It comes in the form of a tape cassette and is simply inserted into the deck. Be certain to use this demagnetizer as frequently as its instructions recommend.

2. A hand-held demagnetizer that plugs into a wall socket is much more effective since it generates a stronger demagnetization field. For the same reason, it must be used very carefully or it may do more harm than good. Before buying or using one, consult your Harman Kardon dealer. Also, read and follow carefully the instructions included with the demagnetizer unit, and be sure no recorded tapes are near the it when the demagnetizer is turned on.

## **Care of Tapes**

1. Store cassettes in their cases in a location away from direct sunlight, excessive heat, and high humidity.
2. Avoid placing a tape near a television set or loudspeaker; their magnetic fields can partial erase the tape.
3. To prevent accidental erasure of a tape, use a small screwdriver to remove the two square tabs located on the side of the cassette opposite the exposed tape. With these tabs removed, the tape cannot be re-recorded by mistake. If you later wish to record on a tape that has been erasure-protected in this way, simply cover the small holes with adhesive tape.
4. Do not use old cassettes whose tape no longer moves smoothly from reel to reel. They may jam and damage your deck.

# TROUBLESHOOTING

This unit is designed for trouble-free operation; most problems encountered by users are due to operating errors. If you have a problem, first check the chart below for a possible solution. If the problem persists, consult your authorized Harman Kardon service center.

<b>If the problem is</b>	<b>Make sure that:</b>
The Display Panel does not illuminate when the Power Switch is pressed.	<ul style="list-style-type: none"><li>■ The power cord is plugged in securely.</li><li>■ The outlet is live.</li></ul>
The Primary Transport does not play when ► (Forward Play) or ◀ (Reverse Play) is pressed.	<ul style="list-style-type: none"><li>■ The display indicates that the Primary Transport has been selected.</li></ul>
The Secondary Transport does not play when ► (Forward Play) or ◀ (Reverse Play) is pressed.	<ul style="list-style-type: none"><li>■ The display indicates that the Secondary Transport has been selected.</li></ul>
No sound is heard when Play is pressed.	<ul style="list-style-type: none"><li>■ The tape is not blank. (Level indicators on the Display Panel will flash if sound is recorded on the tape.)</li><li>■ The receiver/pre-amp/integrated amplifier is on, and its Source, Tape Monitor, and Speaker switches are set correctly.</li><li>■ The tape deck is connected properly.</li><li>■ The hookup cables are unbroken.</li></ul>
The cassette deck does not record.	<ul style="list-style-type: none"><li>■ The erase-prevention tabs have not been removed from the tape cassette.</li><li>■ The Input Level knob is set high enough.</li><li>■ The tape deck is connected properly.</li><li>■ The hookup cables are unbroken.</li></ul>
The cassette deck does not copy.	<ul style="list-style-type: none"><li>■ The Source tape has been placed in the Secondary Transport and the Target tape has been placed in the Primary Transport.</li><li>■ The erase-prevention tabs have not been removed from the Target tape cassette.</li></ul>
When a tape you have recorded is played back, the sound is distorted.	<ul style="list-style-type: none"><li>■ The Input Level was not set too high during recording.</li><li>■ Bias Fine Trim was set correctly when recording.</li><li>■ The tape is being played back in the correct Dolby NR format.</li><li>■ The tape is not worn out.</li><li>■ The tape head is not dirty or magnetized.</li></ul>
When a tape you have recorded is played the sound is muffled, with reduced high frequencies.	<ul style="list-style-type: none"><li>■ The tape is being played back in the correct Dolby NR format.</li><li>■ Bias Fine Trim were set correctly when recording.</li><li>■ The tape head is not dirty or magnetized.</li></ul>



# SPECIFICATIONS

Model	DC5300	DC5500	DC5700
Tape Speed (cm/sec):	4.76	4.76	4.76
Heads (Primary/Secondary):	2/1	2/1	2/2
Record/Play Head Type:	Hard Permalloy	Isotropic	Isotropic
Frequency Response, -20dB with metal tape:	20Hz-18kHz, +/-3dB	20Hz-18kHz, +/-3dB	20Hz-18kHz, +/-3dB
Copy Mode Frequency Response, -20dB with metal tape:	20Hz-17kHz, +/-3dB	20Hz-18kHz, +/-3dB	20Hz-18kHz, +/-3dB
Wow-and-Flutter			
NAB, WRMS:	.06%	.06%	.06%
DIN:	.12%	.12%	.12%
Signal-to-Noise Ratio, w/Type II Tape			
Dolby off:	57dB	57dB	57dB
Dolby B on:	65dB	65dB	65dB
Dolby C on:	73dB	73dB	73dB
Total Harmonic Distortion			
1kHz, Metal tape, Dolby level:	1.5%	1.5%	1.5%
Channel Separation:	45dB	45dB	45dB
Channel Crosstalk:	70dB	70dB	70dB
Erase Ratio:	60dB	60dB	60dB
Bias Frequency:	105kHz	105kHz	105kHz
Fast Forward and Rewind Time (C-60):	90 sec.	90 sec.	90 sec.
Peak Reading Meter Range:	-35dB to +8dB	-35dB to +8dB	-35dB to +8dB
Output Level, 0dB, 10k Ohm load:	640 mV	640 mV	640 mV
Input Sensitivity (0dB) Line/Impedance:	45 mV/22 kOhms	45 mV/22 kOhms	45 mV/22 kOhms
Dimensions (w x h x d, mm):	443 x 134 x 342	443 x 134 x 342	443 x 134 x 342
Weight (lbs/kg):	17.2/7.8	17.2/7.8	17.2/7.8