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Introduction and Safety Information

Thank you for choosing the Harman Kardon DC520 dual cassette deck. The DC520 is an exceptionally well engineered product that offers high performance and ease of use.

We ask that you take a few minutes to read through this Owner’s Manual to familiarize yourself with the controls and functions. This brief investment of time will yield dividends in the form of years of listening pleasure.

If you have any questions about this product, its installation or operation, please contact the retailer or custom installer who sold you the product. They are your best source for local information.

Description and Features

- Dual Mode Copying for high-quality dubs in either “real time” or at “high speed.”
- Auto Tape Sensor automatically recognizes the type of tape in use and sets the bias/equalization circuits accordingly.
- Dolby* B-type and C-type noise reduction for recordings that are virtually free of noise and hiss.
- Dolby HX Pro provides more accurate recording of high frequencies without sacrificing signal to noise ratio or causing distortion.
- Sync Reverse Dubbing programs the record system to compensate for record and playback tapes of unequal length.
- Dual Auto Reverse with multiple playback modes for extended uninterrupted listening.
- Buttons and counters separate for each transport ensures versatility and ease of use.

Important Safety Information

Verify Line Voltage Before Use

Your DC520 has been designed for use with 110-120 volt AC current. Connection to a line voltage other than that for which it is intended can create a safety and fire hazard, and may damage the unit.

If you have any questions about the voltage requirements for your specific model, or about the line voltage in your area, contact your selling dealer before plugging the unit into a wall outlet.

Do Not Use Extension Cords

To avoid safety hazards, use only the power cord supplied with your unit. If a replacement cord is used, make certain that it is of similar gauge. We do not recommend that extension cords be used with this product. As with all electrical devices, do not run power cords under rugs or carpets or place heavy objects on them. Damaged power cords should be replaced immediately by an authorized service station with cords meeting factory specifications.

Handle The AC Power Cord Gently

When disconnecting the power cord from an AC outlet, always pull the plug, never pull the cord. If you do not intend to use the unit for any considerable length of time, disconnect the plug from the AC outlet.

Do Not Open The Cabinet

There are no user serviceable components inside this product. Opening the cabinet may present a shock hazard, and any modification to the product will void your guarantee. If water or any metal object such as a paper clip, wire or a staple accidentally falls inside the unit, disconnect it from the AC power source immediately, and consult an authorized service station.

Installation Location

- To assure proper operation, and to avoid the potential for safety hazards, place the unit on a firm and level surface. When placing the unit on a shelf, be certain that the shelf and any mounting hardware can support the weight of the product.
- Make certain that proper space is provided both above and below the unit for ventilation. If this product will be installed in a cabinet or other enclosed area, make certain that there is sufficient air movement within the cabinet.
- Do not place the unit directly on a carpeted surface.
- Avoid installation in extremely hot or cold locations, or an area that is exposed to direct sunlight or heating equipment.
- Avoid moist or humid locations.

Cleaning

When the unit gets dirty, wipe it with a clean, soft dry cloth. If necessary, wipe it with a soft cloth dampened with mild soapy water, then a fresh cloth with clean water. Wipe dry immediately with a dry cloth. NEVER use benzene, thinner, alcohol or any other volatile cleaning agent. Do not use abrasive cleaners, as they may damage the finish of metal parts. Avoid spraying insecticide near the unit.

Moving The Unit

Before moving the unit, be certain to disconnect any interconnection cords with other components, and make certain that you disconnect the unit from the AC outlet.

*Dolby is a trademark of Dolby Laboratories
Unpacking and Installation

The carton and shipping materials used to protect your new DC520 during shipment were specially designed to cushion it from shock and vibration. We suggest that you save the carton and packing materials for use in shipping if you move or should the unit ever need repair.

To minimize the size of the carton in storage, you may wish to flatten it. This is done by carefully slitting the tape seams on the bottom and collapsing the carton down to a more two dimensional appearance. Other cardboard inserts may be stored in the same manner. Packing materials that cannot be collapsed should be saved along with the carton in a plastic bag.

If you do not wish to save the packaging materials, please note that the carton and other sections of the shipping protection are recyclable. Please respect the environment and discard those materials at a local recycling center.

When positioning your DC520 in its final location, make certain that any shelf or stand is capable of supporting its weight, and that there is adequate ventilation on all sides, as well as on the top and bottom. Do not place CDs, record jackets, owner’s manuals, or other paper on top of, or beneath the unit. This will block air flow and create a potential fire hazard. If the unit is to be enclosed in a cabinet or rack, make certain that there is adequate air circulation, with a means provided for hot air to exit, and for cool air to be brought in.

Conventions

In order to help you use this manual and make the proper system connections, certain conventions appear throughout the manual.

EXAMPLE – (bold type) indicates a specific front panel button

EXAMPLE – (OCR type) indicates a message that is visible in the front panel display

1 - (number in a circle) indicates a specific front panel control

1 - (number in a square) indicates an indicator in the front panel display

Declaration of Conformity

We, Harman Kardon Europe A/S
Kongevejen 194B
DK-3460 Birkerød
DENMARK

declare in own responsibility, that the product described in this owner's manual is in compliance with technical standards:
EN 55 013/6.1990
EN 55 022/6.1993
EN 60 065/1994
EN 61 000-3-2/1995

Steen Michaelsen
Harman Kardon Europe A/S
Birkerød, DENMARK, 7/98
Front Panel Controls

1. **Power Switch** – Press this switch once to turn the unit on. Press it again to turn it off. An indicator around the switch turns green when the unit is turned on.

2. **Secondary Transport** – This is the secondary, playback only transport. Use it for tapes that will be the source material during dubbing operation.

3. **Remote Sensor** – The remote sensor behind this area is compatible with the commands from many Harman Kardon remote controls. Keep this area clear if you wish to use the DC520 with a remote control.

4. **Secondary Counter Reset** – Press this button to reset the counter for the secondary transport to “0000”.

5. **Sync Reverse** – This button activates circuitry that compensates for record and playback tapes of unequal length.

6. **Information Display** – This display provides detail about the operation of the DC520. See the separate explanation of each indicator on page 4.

7. **Copy Button** – Press this button to activate normal speed copying.

8. **Primary Counter Reset** – Press this button to reset the counter for the primary transport to “0000”.

9. **High Speed Copy** – Press this button to activate high speed dubbing.

10. **Record Mute** – Press this button during recording to momentarily mute the input and insert blank space.

11. **Primary Transport** – Insert tapes here for recording or playback. This transport should always contain the record tape during dubbing.

12. **Primary Transport Eject** – Press this button to open the primary transport door.

13. **Primary Transport Fast Forward** – Press this button to rapidly advance the primary tape.

14. **Primary Transport Rewind** – Press this button to rewind the primary tape.

15. **Primary Transport Forward Play** – Press this button to play the primary tape.

16. **Primary Transport Reverse Play** – Press this button to play the primary tape in a reverse direction.

17. **Primary Transport Stop** – Press this button to stop the primary transport.

18. **Pause** – Press this button to pause the transport in use.

19. **Record** – Press this button to place the unit in the record ready mode. Press it simultaneously with a play button to start a recording.

20. **Headphone Jack** – Insert stereo headphones here for private listening or record monitoring.

21. **Input Balance** – This control adjusts the left/right record balance.

22. **Input Level** – This knob controls the input level during recordings.

23. **Secondary Transport Fast Forward** – Press this button to rapidly advance the secondary tape.

24. **Secondary Transport Rewind** – Press this button to rewind the secondary tape.

25. **Secondary Transport Forward Play** – Press this button to play the secondary tape.

26. **Secondary Transport Reverse Play** – Press this button to play the secondary tape in a reverse direction.

27. **Secondary Transport Stop** – Press this button to stop the secondary transport.

28. **Dolby NR Selector** – This switch selects which type of Dolby Noise Reduction, if any, is in use.

29. **Direction Mode Selector** – This switch selects the playback/auto reverse mode for the tape in use.

30. **Secondary Transport Eject** – Press this button to open the secondary transport door.
Installation & Operation

Installation

Connecting the DC520 to your audio system is simple. Using standard RCA to RCA audio interconnect cords, connect the left and right OUTPUT jacks on the rear panel to the TAPE INPUT jacks of your receiver or preamplifier. Connect the INPUT jacks on the DC520 to the TAPE OUTPUT jacks of your receiver or pre-amp.

Connect the power to a non-switched AC wall output, or to the accessory outlet on the rear of another audio device in your system and you are ready to go!

NOTE: When using the accessory outlet on another product to power the DC520 make certain that it has the ability to power a device that draws at least 14 watts of current in addition to the requirements of other devices that may be plugged into the accessory outlets. If you use a “switched” outlet it is important to remember that the host product must be turned on in order for the DC520 to operate.

Single Deck Playback

The DC520 may be used as a conventional auto reverse audio cassette deck, playing back tapes from either transport.

1. Check the tape for excessive slack before use. If necessary, take up the slack by inserting a pencil into one of the cassette hubs and rotate the pencil to take up the slack.
2. Press the EJECT button for the transport you wish to use.
3. Insert the tape with the open edge facing down.
4. Gently press the door of the cassette compartment closed.
5. Select the appropriate type of Dolby Noise Reduction, if any, using the DOLBY NR switch. This information is typically displayed on the label of prerecorded cassettes.
6. If you wish to clear the counter before playback, press the RESET button next to the transport you will be using.
7. Press the PLAY/ or button for the transport that will be used. Play can be in either the forward direction or reverse, which will play that side of the tape facing outside of the door (may be “A” or “B” corresponding to the labeling on the cassette), or reverse to play the opposite side of the tape. In any case the tape will run into the direction in which the arrow of the pressed PLAY button shows.
8. When the unit is in the play mode, tape movement may be momentarily stopped using the PAUSE button. Press the Pause button again to resume operation.
9. When the unit is in the play mode it will continue to run until the unit is manually stopped, or until the end of the tape is reached. Using the Auto Reverse system, playback may continue through the second side of a tape, or it may run continuously. For information on Auto Reverse Functions, see pages 5 - 6.

**Recording**

To make a recording follow the instructions listed above for inserting the tape in the unit. Recordings may only be made using the Primary Transport on the right side of the unit.

NOTE: The DC520 will automatically sense the type of tape in use (conventional, chromium dioxide or metal) and make the necessary internal adjustments. No switch settings are required to indicate the tape type.

Once a tape has been inserted, follow these steps to make a recording:

1. Select the type of Dolby Noise Reduction desired, if any, using the DOLBY NR switch.

2. Press the RECORD button to place the unit in the "Record Ready" mode and observe that the LEVEL METER will begin to react to the incoming audio source. Adjust the INPUT LEVEL CONTROL so that the bars on the INPUT METER briefly reach the red "0dB" point when normal or chrome tapes are in use, or the red "+3dB" mark when metal tapes are used.

3. Adjust the INPUT BALANCE CONTROL so that the left/right signal level inputs appear equal, if required.

4. To start the recording press the → or ← button corresponding to the direction in which you wish to record. Recordings may be made in either the forward direction which will record on the "outer" side of the tape (see item 7, page 4), or reverse which will record on the opposite side of the tape. If the direction is changed towards the formerly selected the corresponding Play button must be pressed twice or you press the Pause button after the first press.

5. To pause the tape transport during a recording, press PAUSE. Press the button again to resume recording.

6. Once a recording is started, it will continue until the end of the tape, or until the unit is manually stopped. Using the Auto Reverse system, recordings may continue through the second side of a tape. For information on Auto Reverse Functions, see pages 5 - 6.

NOTE: When the unit is in the RECORD mode, any material previously recorded on the tape will be erased.

**Record Muting**

The REC MUTE feature enables you to place blank spaces on tapes during recording. These spaces are useful in separating different portions of the program material, and the four-second space is used to trigger the automatic program search systems found in many automotive and home cassette units.

**Automatic Muting During a Recording**

If you wish to insert a four-second blank space during a recording, or to end a recording, press the REC MUTE button. The REC indicator will flash and a four-second blank space will be placed on the tape. Once the blank space is recorded the unit will stop and go into a Pause mode. Press the PAUSE button to restart the recording.

To place a blank space longer than four seconds, press and hold the REC MUTE button for the length of time the blank space is desired. When the button is released the unit will automatically go into the Pause mode. Press the PAUSE button to resume recording.

**Automatic Spacing Insert On a Stopped Tape**

If you wish to insert a four-second blank space before starting a recording, first press the RECORD button to place the unit in the "Record Ready" mode. Press the REC MUTE button and note that the transport will start and run for four seconds and then return to the pause mode.

**Automatic Spacing Insert Without Stopping The Tape**

To place a blank space of less than four seconds on the tape without stopping tape motion press the REC MUTE button once. Press the button a second time before four seconds elapse to place a blank space on the tape without stopping machine. Remember that the machine will go into a pause mode if the Rec Mute button is not pressed within 31/2 seconds.

**Auto Reverse Operation**

The DC520 features Dual Auto Reverse operation, allowing a wide range of auto reverse functions that allow for automated, continuous playback and recording.

Auto reverse functions are set by the DIRECTION MODE switch. Operation of the unit will vary according to the switch setting, if one or both transports is in use, and if the unit is in playback or record.

**Single Side Playback or Recording**

To play or record only one side of a tape, place the DIRECTION MODE switch in the left position, over the icon. With the switch in this mode, the DC520 will play or record in whichever direction is selected and then stop at the end of one side of the tape.

**Auto Reverse Playback or Recording**

For uninterrupted playback of both sides of a tape, place the DIRECTION MODE switch in the center position, over the icon. With the switch in this mode, the playback and recording will continue.
The DC520 will automatically repeat when both sides have played through side of the cassette and automatically playback. The unit will play the entire first side on which PLAY button is pressed to start operation. Auto reverse recording is only possible using the Primary Transport.

Continuous Playback With One Transport
For continuous playback of a tape in either the Primary Transport or the Secondary Transport, but not both, place a tape only in the desired transport. Set the DIRECTION MODE switch in the far right position, over the “Cont Play” icon.

Press either the forward or reverse play button on the transport to start the playback. The unit will play the entire first side of the cassette and automatically switch to the second side of the cassette. When both sides have played through once, the DC520 will automatically repeat the process so that each side is played a total of five times without interruption. At the conclusion of five cycles the unit will stop.

Continuous Playback With Both Transports
For maximum playback time, place a tape in both the Primary and Secondary Transports. Set the DIRECTION MODE switch in the far right position, over the “Cont Play” icon. Press any of the FORWARD or REVERSE PLAY buttons to start the playback.

Once playback is started, the DC520 will first play the entire first side of the transport where the PLAY button was pressed. At the end of the first side, the unit will automatically play the second side of the tape. After the first tape has been played completely through, the unit will switch to the other transport, and play the first side, and then the second side of the tape in that transport.

This cycle will repeat five times, playing both sides of each cassette in succession. After five full cycles the unit will stop.

Note: In playback this operation will function with either transport, depending on which PLAY button is pressed to start operation. Auto reverse recording is only possible using the Primary Transport.

Continuous Playback With Both Transports
For maximum playback time, place a tape in both the Primary and Secondary Transports. Set the DIRECTION MODE switch in the far right position, over the “Cont Play” icon. Press any of the FORWARD or REVERSE PLAY buttons to start the playback.

Once playback is started, the DC520 will first play the entire first side of the transport where the PLAY button was pressed. At the end of the first side, the unit will automatically play the second side of the tape. After the first tape has been played completely through, the unit will switch to the other transport, and play the first side, and then the second side of the tape in that transport.

This cycle will repeat five times, playing both sides of each cassette in succession. After five full cycles the unit will stop.

Note: Any of the Auto Reverse modes may be stopped at any time by pressing the STOP button.

Counter Operation
Each transport has a separate tape counter that indicates the motion of the transport and the relative amount of tape used. When in the normal or fast forward mode the numbers will increase. When the unit is in a reverse mode the numbers will decrease.

To reset either counter press the appropriate RESET button.

Tape Dubbing
The DC520 is capable of both normal and high speed dubbing for ease in making cassette copies. The steps for making a dub are slightly different from those used to make normal recordings, so please make note of the following steps:

1. Turn the DC520 on using the POWER switch.
2. Open the transport doors by pressing both EJECT buttons.
3. Place a blank tape in the Primary Transport and the tape to be copied in the Secondary Transport.
4. Press the TRANSPORT REWIND buttons so that both tapes are in their fully rewound position.
5. Select the auto reverse mode using the DIRECTION MODE switch.
   - To dub only one side of a tape, place the switch in the far left position under the icon.
   - To dub both sides of a tape, place the switch in the center position, under the icon.
6. Make certain that both transports are in the forward direction, as indicated by the arrow above each tape counter display. If one transport is in the incorrect direction briefly press the appropriate FORWARD PLAY button and then immediately press the STOP button.
7. Press either the COPY button or the HIGH SPEED COPY button to start the dubbing process.
   - High Speed dubbing runs both transports at double speed, so that tapes are copied in half their normal running time. Note, however, that the High Speed Mode may produce a slightly lower quality copy. In addition, the High Speed Mode is susceptible to interference from the horizontal scanning frequency of television sets. If your DC520 is located close to a TV set you may wish to use the normal speed Copy Mode.
   - “Copy” starts a dub in “real time,” where the dub takes the same time as the length of the cassette. This mode will produce a better quality dub, but without the time saving of High Speed.
8. When the dubbing is completed, both transports will stop, based on the setting of the DIRECTION MODE switch: The copy will stop if either tape comes to the end of its first side (dub one side selected) or to the end of its second side (dub both sides selected).
9. To stop the dubbing at any time, press either STOP button 7.

Manual Editing During Dubbing
When making dubs in the “Copy” (Normal Speed) dub mode it is possible to skip some of the material on original tape.

To pause dubbing material from the original tape, press the PAUSE button R while the unwanted material is playing. The Primary Transport (record cassette) will stop while the Secondary Transport (playback cassette) will continue to play. Listen to the output of the DC520 using either the tape monitor mode or the front panel headphone jack Q. When you wish to resume the recording, press the PAUSE button R again.

To insert blank space on a dub (copy) tape instead of unwanted material, press the REC MUTE button Q. The Secondary (playback) Transport will continue to play, but the Primary (record) Transport will stop while the Secondary Transport will continue to play. Listen to the output of the DC520 using either the tape monitor mode or the front panel headphone jack Q. When you wish to resume normal dub recording, press the REC MUTE button Q or press the REC MUTE button Q again before the transport is set into the pause mode.

NOTES:
• All transport function controls except for STOP, PAUSE and REC MUTE are inoperative during dubbing.

• The INPUT LEVEL control is not operable during dubbing. The DC520 will automatically set proper audio levels.

• The DOLBY NR circuits are not used during dubbing.

• Since the audio quality of any dub is slightly less than the original tape, it is recommended that all copies be made from original tapes, not from other copies.

• During dubbing the RECORD LEVEL INDICATOR will show the level from the playback (original) tape in the Secondary Transport.

Sync Reverse Dubbing
The Sync Reverse Mode allows both transports to be reversed at exactly the same time during dubbing operations. This is particularly convenient when using tapes with different lengths, as it permits copies with the same contents as the original. Follow these steps to start Sync Reverse dubbing:

1. Prepare the unit for dubbing as described on page 6. Make certain both decks are set to the Forward direction by checking to see that the — indicator 2 is illuminated for each transport.

2. Place the DIRECTION MODE switch E in the center position, over the △ icon.

3. Press the SYNC REV button S. Note that the SYNC REV indicator S will illuminate.

4. Press either the Copy F or High Speed Copy F button to start the dub process. The tapes will follow one of the two following modes, depending on the relationship of the length of the original tape to the copy tape:

• If the original tape (in the Secondary Transport for playback) is shorter than the record tape (in the Primary Transport), the dub will start by recording until the end of the first side of the original. When the original tape’s first side has been dubbed, the Secondary (playback) Transport will stop, while the Primary (Record) Transport will continue in a “no signal” mode, recording blank material. When the Primary Transport cassette reaches the end of its first side, both tapes will reverse, and the dub will continue with the second side of the original being dubbed to the beginning of the copy tape. The recording will continue until the playback tape ends. At that time both transports will stop simultaneously.

• If the original tape (in the Secondary Transport for playback) is longer than the record tape (in the Primary Transport), the dub will start by recording through the end of the (recording) tape in the Primary Transport. At the end of the (recording) Primary tape, the Primary Transport will stop, and the Secondary Transport will continue playback. At the end of the Secondary cassette, both tapes will reverse direction and the recording process will resume. The recording will continue until the Primary (record) tape ends. At that time both transports will stop simultaneously.

NOTE: When playback tape is longer than the record tape, as described above, some of the material at the end of each side of the playback tape will not be recorded on the dub.

Remote Control Operation
The DC520 features a built in remote sensor that enables certain functions of the Primary Transport to be controlled with the system remote supplied with many Harman Kardon receivers. The DC520 is also compatible with the “Harman Kardon Codes” available in many preprogrammed remote controls. Consult the instructions supplied with your receiver or the remote control for information on functions available to operate cassette decks.

When using a remote control remember to point the remote at the DC520’s front panel sensor △.

Note: With Harman Kardon system remotes the DC520 will only respond to remote commands for the transport functions Pause, Stop, Play Forward / Reverse and Fast Forward / Rewind. Moreover Power On/Off is NOT controlled via the remote system.
Operation

Maintenance

Cleaning The Tape Heads

Tape heads should be cleaned periodically to remove tape particles which gradually build up on the heads during normal use. This dirt will impair sound quality and may cause increased tape head wear. Tape heads may be cleaned in one of two ways:

1. Use a commercial tape cleaning cassette. A wide variety of these products is available from your dealer. Carefully follow the instructions in the cleaning kit to avoid damage to your DC520.

2. Remove the cassette from the transport to be cleaned. Slightly dampen a cotton swab with isopropyl alcohol or the tape head cleaning solution available from many dealers. Gently rub the exposed surfaces of each head. Use a second moistened swab to clean other metal surfaces that may be coated with tape residue such as guide pins. Be careful to keep the swab away from rubber rollers unless you are using a cleaning liquid that is specifically approved for use on rubber rollers.

Demagnetization

Tape heads and other internal parts will gradually pick up magnetic fields that may add noise to your recordings or possibly cause partial erasure of recorded tapes. To prevent this problem, tape heads should periodically be demagnetized using either of two devices:

1. A battery-powered demagnetizer is easiest to use. In the shape of a tape cassette, it simply needs to be inserted into the transport. Carefully follow the manufacturer's instructions to insure proper results.

2. Hand-held, AC-powered demagnetizers are more effective as they generate stronger fields. Consult your dealer for information on this type of unit and be certain to follow the instructions carefully. When using this type of unit be certain to keep it away from prerecorded tapes when it is turned on, as it may erase them.

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 may partially erase the material on a recorded tape.

3. To avoid accidental erasure of the material on a cassette, remove the two small square tabs located on the top edges of the cassette. When these tabs are removed the tape may not be used for recording. To record on a tape that has previously had the protection tabs removed, carefully cover the small holes with adhesive tape.

4. Do not use old cassettes whose internal tape reels no longer move smoothly. If you hear unusual noises during tape motion it is wise to discard the tape to prevent jams or damage to your machine.

Specifications

- Track System: 4 Track, 2 Channel Stereo
- Tape Speed: Normal Play/Record: 1\(\frac{7}{8}\) ips (4.76 cm/sec)
  High-Speed Copy: 3\(\frac{3}{8}\) ips (9.5 cm/sec)
- Wow and Flutter (WRMS): 0.06%
- Frequency Response (Overall at -20 dB):
  - Metal Tape: 25Hz-19kHz
  - Chrome Tape: 25Hz-18kHz
  - Normal Tape: 25Hz-17kHz
- Signal to Noise Ratio (Overall):
  - Dolby C on: 79dB
  - Dolby B on: 69dB
  - NR Off, 3% THD: 59dB
- Fast Wind Time: 110 seconds for C-60
- Input Sensitivity:
- Input Impedance: 97mV/50K ohms
- Line Output: 0.52V for 50K ohm load
- Headphone Impedance: 8 ohms
- Dimensions (W x H x D): 440 x 147 x 284 mm
  17.3 x 5.8 x 11.2 inches
- Weight: 4.6 kg / 10.14 lbs
- Power Requirement: 120VAC @60Hz
- Power Consumption: 14 Watts
The DC520 is designed for trouble-free operation. However, like any mechanical device it may occasionally malfunction. In most cases the trouble can be resolved simply by finding the problem from the list below and following the steps outlined. If a problem persists, contact your dealer or an authorized Harman Kardon Service Center.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>The unit does not turn on when the power switch is pressed.</td>
<td>• No AC Power.</td>
<td>• Make certain AC power cord is firmly plugged into a live outlet.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Check to see if outlet is switch controlled.</td>
</tr>
<tr>
<td>No sound is heard when PLAY is pressed.</td>
<td>• Tape may be blank.</td>
<td>• Check to see if level indicators do not move. This confirms a blank tape.</td>
</tr>
<tr>
<td></td>
<td>• Improper settings at receiver or preamp.</td>
<td>• Check switch settings at receiver. Make certain that Tape Monitor or correct input is selected.</td>
</tr>
<tr>
<td></td>
<td>• Interconnect cables connected to wrong jacks.</td>
<td>• Make certain that the OUTPUT of the DC520 is connected to the TAPE IN jack of your receiver or preamp.</td>
</tr>
<tr>
<td>The cassette does not record.</td>
<td>• Record protection tabs removed.</td>
<td>• Place tape over record protection holes.</td>
</tr>
<tr>
<td></td>
<td>• Record Level knob set too low.</td>
<td>• Increase input level .</td>
</tr>
<tr>
<td></td>
<td>• No source signal feeding recorder.</td>
<td>• Check Source Selection on receiver to make sure the proper source is selected.</td>
</tr>
<tr>
<td></td>
<td>• Interconnect cables connected to wrong jacks.</td>
<td>• Make certain that the DC520 INPUT jacks are connected to the TAPE OUT jacks on your receiver or preamp.</td>
</tr>
<tr>
<td>Cassette dub does not record.</td>
<td>• Tapes in wrong transport.</td>
<td>• Make certain that source tape is in Secondary Transport and blank (record) tape is in Primary Transport.</td>
</tr>
<tr>
<td>Newly recorded tapes have distorted sound.</td>
<td>• Input level too high.</td>
<td>• Reduce input level so that record level display peaks at “0” to “+3”.</td>
</tr>
<tr>
<td>Sound is intermittent</td>
<td>• Tape is worn.</td>
<td>• Replace cassette with new, high-quality tape.</td>
</tr>
<tr>
<td>Playback sound is muffled, distorted or has reduced high frequencies.</td>
<td>• Mismatched Dolby NR modes.</td>
<td>• Make certain that Dolby NR mode used for playback is identical to mode used in recording.</td>
</tr>
<tr>
<td></td>
<td>• Tape heads are dirty.</td>
<td>• Clean tape heads.</td>
</tr>
<tr>
<td></td>
<td>• Tape heads have become magnetized.</td>
<td>• Demagnetize tape heads.</td>
</tr>
</tbody>
</table>

All specifications are subject to change without notice.
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