PHILIPS

DCC 380 Digital Compact Cassette Recorder

PHILIPS

Dear customer!

Congratulations on purchasing this DCC 380. We have made use of our longstanding experience and have not spared the use of up-to-date technology, and thus succeeded in developing the DCC 380.

In 1963, PHILIPS launched the music cassette, which quickly conquered the world. In 1991, 2,6 thousand millions of cassettes and 180 millions of cassette recorders have been sold worldwide.

In the eighties, a new Audio system was invented - the CD. The CD (Compact Disc) revealed to you the new dimension of digital sounds and added to the pleasures of Audio.
Digital recordings on CD permit a high contrast in loud as well as in quiet passages with perfect channel separation. It is less sensitive to dirt and destruction, as the CD player is equipped with an error correction.

Philips has now further developed the music cassette - and the result is the DCC.
DCC (Digital Compact Cassette) fills the large gap between the music cassette and the compact disc. DCC is capable of being recorded on and played back just like the music cassette. The quality and the capacity is that of a CD. An additional advantage is that you can also play the 'normal' music cassette.

Please read the operating instructions carefully, to be able to enjoy the troublefree operation of the DCC 380 for a long time.

Copyright:

Recording is permissible insofar as copyright or other rights of third parties are not infringed.
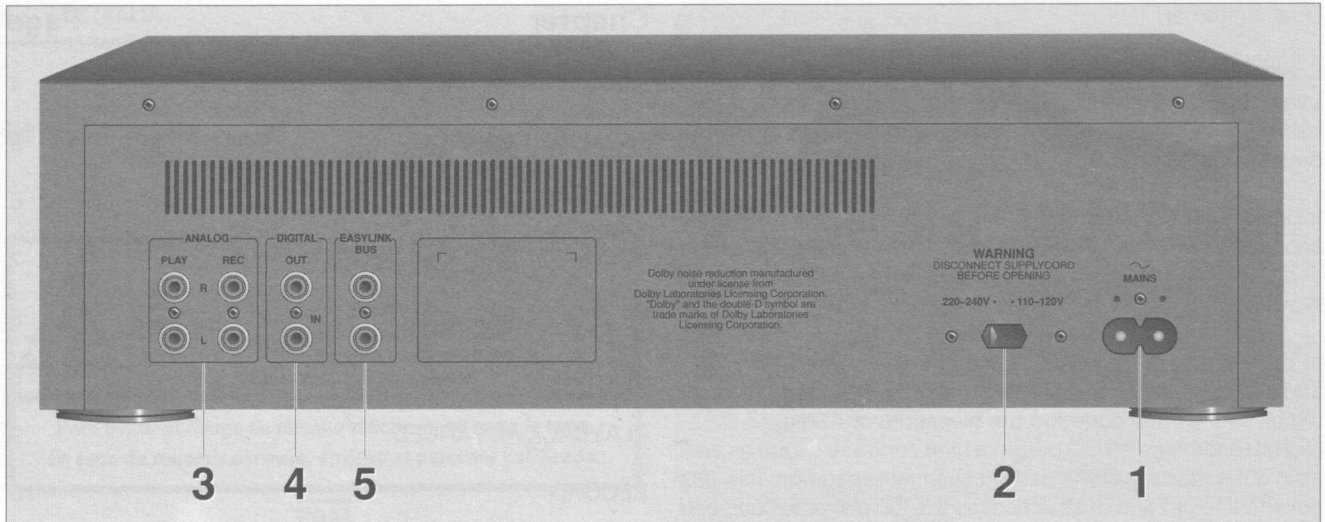
Only for U.K.:
Recording an playback of material may require consent. See Copyright Act 1956 and The Performer's Protection Acts 1958 to 1972.

This product complies with the radio interference requirements of the European Community.

Rear panel:

1	MAINS	Be sure to connect the unit to the correct mains voltage via the supplied mains cable.
2	VOLTAGE SELECTOR	Select the mains voltage corresponding to the local mains voltage (220-240 V, 110-120 V).
3	ANALOG REC	Input sockets (left/right) for an analog audio signal .
	ANALOG PLAY	Output sockets (left/right) of an analog audio signal.
4	DIGITAL IN	Input socket for a digital audio signal.
	DIGITAL OUT	Output socket of a digital audio signal.
5	EASYLINK BUS	For connecting the 'DCC 380' to the PHILIPS HiFi Midi System 'FS 380'. 'CD DUBBING' is only possible with this BUS connection.

Installation:

> **WARNING**
> **Do not connect the set to the mains until all other connections have been made and the mains voltage has been checked.**

The type plate is located on the rear of the unit.

- Do not place the 'DCC 380' in humid, too warm or hot areas (e.g. on top of the amplifier), near magnetic fields (e.g. TV) or in dusty rooms, as this will reduce the life of the unit.

- When positioning the unit, put the 'DCC 380' on the bottom of the stack.

- Keep a free space of a few centimeters around the unit and do not cover any vents.

- After you have positioned the unit correctly, it has to adapt to the new ambient temperature. Leave the 'DCC 380' for about 30 minutes, to allow possible condensation water to evaporate.
  Failure to follow these instructions may cause damage to the electronics!

- Connect the units using the supplied cables as follows:

ANALOG REC - Insert the red plug to the R socket and the other plug to the L socket of your 'DCC 380'. Insert the two other plugs to the DCC REC sockets of your amplifier. You can also use the TAPE or AUX outputs of your amplifier.

ANALOG PLAY - Insert the red plug to the R socket and the other plug to the L socket of your 'DCC 380'. Insert the two other plugs to the corresponding DCC PLAY sockets of your amplifier.

DIGITAL IN - Insert one plug of the cinch lead to the input socket of your 'DCC 380' and the other plug to the corresponding digital output socket of a CD player.

DIGITAL OUT - This output supplies a digital signal via an electrical path; for this reason it can only be connected to a product with a digital input e.g. amplifier, DCC or DAT. Use a cinch lead (not supplied) with one cinch plug on either end.

EASYLINK BUS - Insert one plug of the cinch lead to one socket of your 'DCC 380' and the other plug to the EASYLINK BUS socket of the CD player, which has to be connected to the EASYLINK BUS socket of the receiver. With the other socket you have the possibility to make a connection to the EASYLINK socket of e.g. a CD or DCC player.

- Select the local mains voltage at the rear of the 'DCC 380'.

- Connect the smaller plug of the supplied mains cable to the MAINS socket of the 'DCC 380' and the mains plug to the wall outlet.

- You can now start the operation. Enjoy yourself!

A few recommendations:

- If the unit is not used for some time, switch the unit off and pull the mains plug out. By doing this, you will protect it from lightning damage.

- When you pull the mains plug out, do not take it by the cable, but by the connector shell.

- When you have pulled the mains plug out, do not touch the two contact pins, as the 'DCC 380' needs a few seconds to discharge.

Front panel:

1	POWER STANDBY/ON	To switch the unit on and off.
2	SIDE A-B	To select side A or side B of the tape.
3	OPEN/CLOSE	To open and close the cassette compartment.
4	DISPLAY	To show various information at the display panel.
5	RESET	To reset the tape counter to '☐☐☐☐'.
	TIME	To call the time information.
	TEXT	To call text information.
6	REC. LEVEL	To adjust the record level.
7	DOLBY B/C NR	To select the DOLBY NR functions.
	DIGITAL ANALOGUE	To select the type of the recording input.
	RENUMBER	To correct the sequence of tracknumbers.
8	WRITE MARK	To write various markers.
	MARK ERASE	To erase various markers.
9	CD DUBBING	To synchronize the start of recording with the start of a CD.
	REC. PAUSE	To interrupt the recording temporarily and to enter the RECORD PAUSE mode.
10	PHONES	Socket for headphone connection.
	VOLUME	To adjust the volume when using headphones.

11	APPEND	To search a free position for recording. The unit searches a free position on the cassette, provided you have always been using the function APPEND for recording. When this free position is found, you can start recording.
	REC/MUTE	To record from your chosen audio source and to record 'digital silence'.
12	REC. BALANCE	To adjust the balance during recording.
13	REWIND	To wind the tape backward.
	PREVIOUS	To rewind the tape to the beginning of the current music track.
	STOP	To stop the tape.
	PLAY	To start playback.
	NEXT	To wind the tape to the next music track.
	WIND	To wind the tape forward.
14	REPEAT	To repeat the current track and to repeat the entire cassette.

5

Different types of cassettes

Available on the market are the

DCC (Digital Compact Cassette),

and the

ACC (Analog Compact Cassette), also called 'Music Cassette'.

In this instruction for use we are going to use the abbreviations **DCC** and **ACC**.

Both cassettes are available in various lengths and tape materials. The 'DCC' and the 'ACC' can be used in the 'DCC 380'. The 'DCC' has a cover designed for quick and easy handling. Always keep the 'DCC' and the 'ACC' in the cover after use to avoid damages.

The 'DCC' and the 'ACC' must not come into contact with dust or liquids, and must not be exposed to high temperatures and to magnetic fields (heaters, TV sets, transformers...). Do not push the tape protection of the 'DCC' aside, and avoid touching the tape of the 'ACC'.

To protect the 'DCC' from re-recording, activate the record protection by pushing the red button up.

DCC:

When inserting the 'DCC' please observe the following points:

- Insert the 'DCC' lengthwise into the open tray.
- The inscription must be face up.
- The protective slider must be on the right side.
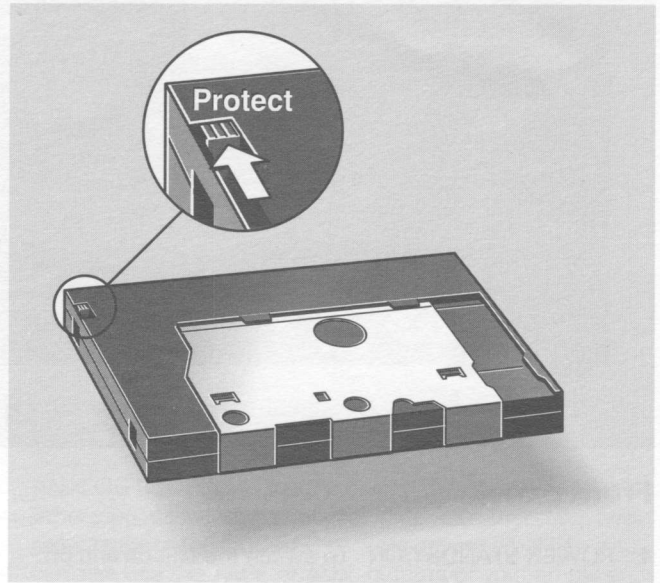
ACC:

When inserting the 'ACC' please observe the following points:

- Insert the 'ACC' lengthwise into the open tray.
- The inscription must be readable from the right side.
- Make sure that the ACC is not dirty or damaged as this could affect the operation of the unit.

DCC prerecorded	... can be bought prerecorded in the shops and can only be played back. The prerecorded 'DCC' can display information like text, track numbers, playing times and tape counter.
DCC user-recorded	... the recording will be made by yourself. The user-recorded 'DCC' can display information like track numbers, playing times and tape counter.

ACC	... has been recorded with an 'analog cassette recorder' and can only be played back on the 'DCC 380'. The 'ACC' can only display the tape counter.

English

Press the **POWER STANDBY/ON** key to switch the unit on. After being switched on, the unit checks if a tape has been inserted.
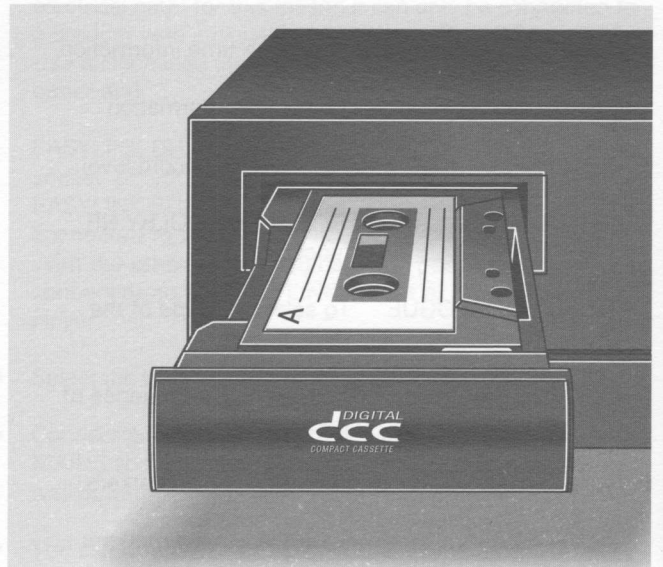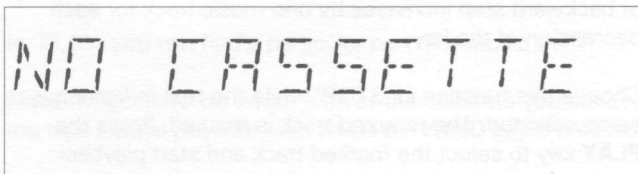
If the unit does not find a cassette, the display panel shows:
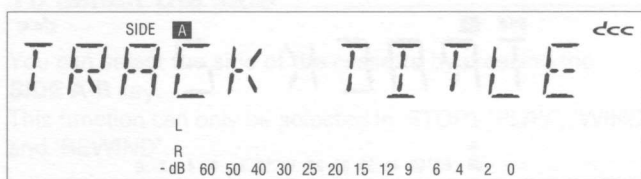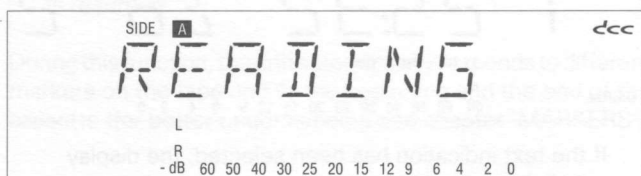
NO CASSETTE

Press the **OPEN/CLOSE** key to open the tray and insert a cassette.
Close the tray by pressing **OPEN/CLOSE** again. You can also close the tray by a short slight pressure to its front.

After the tray has been closed, the unit reads and stores the text and time information of the inserted cassette.

If the unit finds a pre-recorded DCC, the display panel shows for instance:

SIDE A   dcc

READING

L
R
-dB 60 50 40 30 25 20 15 12 9 6 4 2 0

SIDE A   dcc

TRACK TITLE

L
R
-dB 60 50 40 30 25 20 15 12 9 6 4 2 0

If the unit finds a user-recorded DCC, the display panel shows for instance:

TRACK SIDE A TOTAL   TIME   dcc

-- --   23:04 STOP

L
R
-dB 60 50 40 30 25 20 15 12 9 6 4 2 0

If the unit finds an 'ACC', the display panel shows for instance:

SIDE A   CC

0000 STOP

L
R
-dB 60 50 40 30 25 20 15 12 9 6 4 2 0
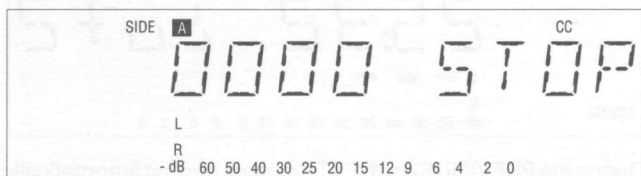
The unit can be switched to 'STANDBY' by pressing the STANDBY key on the amplifier (or on the remote control).

Pressing one of the basic functions on the unit or on the remote control cancels the 'STANDBY' and reactivates the unit:

> **OPEN / CLOSE**,
> **PLAY**,
> **STOP**,
> **NEXT**,
> **PREVIOUS**,
> **WIND**,
> **REWIND**,
> **STANDBY** on the amplifier.

When you switch the unit off, the tape information of the cassette (various texts and times) are erased from the unit's memory. When you switch it on again, the tape information is re-read.

Notes:
The instruction to open can be given from any function with the exception of 'RECORD' and 'RENUMBER'.
While the tray is opened or closed, the display panel shows 'OPEN' or 'CLOSE'.

If a rewound DCC is inserted, the unit automatically searches the beginning of the first music track.

● Switch the unit on.

● Open the cassette compartment.

● Correctly insert the cassette.

● Close the cassette compartment.

● The unit automatically identifies the new cassette.

● Press the **PLAY** key to start the playback.
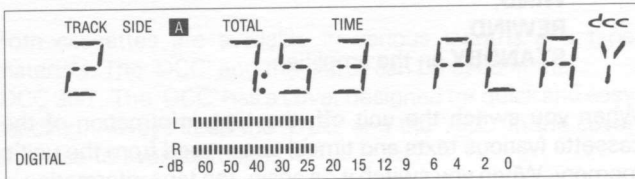The display panel shows for instance:

```
TRACK  SIDE A   TOTAL    TIME                    dcc
  2        7:53  PLAY
         L ||||||||||||||||||||
DIGITAL  R ||||||||||||||||||||
         -dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```

● To stop the playback, press the **STOP** key.

● Open the cassette compartment.

● Take the cassette out.

● Close the cassette compartment.

● Switch the unit off.

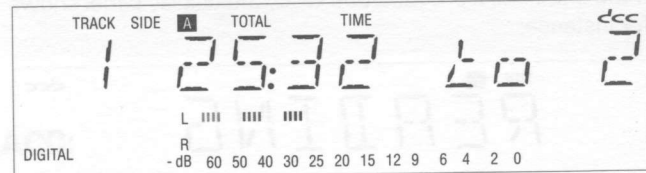> **You can find detailed information in the chapter 'PLAYBACK ADVANCED' .**

Track search run

With the keys **PREVIOUS** and **NEXT** you can wind forward or backward to the required music track.
If one of the two keys is pressed several times, the forward or backward step increases by one music track for each depression of the key.
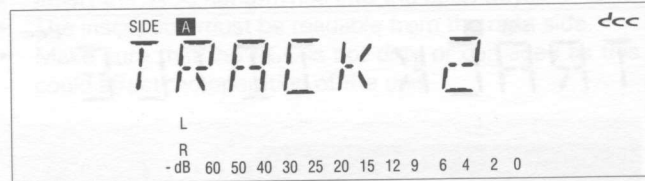
Choose this function in 'STOP' while the text indication is being selected. The required track is marked. Press the **PLAY** key to select the marked track and start playback.

If you choose this function in 'PLAY', the required track is selected and played.

● If you press the **PREVIOUS** or the **NEXT** key with a 'prerecorded DCC', the new music track will show on the display panel.
If the time indication has been selected, the display panel shows for instance:

```
TRACK  SIDE A   TOTAL    TIME                    dcc
  1        25:32  to  2
         L ||||  ||||  ||||
DIGITAL  R
         -dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```

If the text indication has been selected, the display panel shows for instance:

```
       SIDE A                                    dcc
         TRACK 2
         L
         R
         -dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```

● If you choose this function with an ACC, there must be a silent passage of 4 seconds between the tracks, otherwise this function will not work correctly.

If the unit knows the number of music tracks (DCC), the newly selected track cannot be higher than the highest possible on the cassette. If the current track number is not known the display indicates the backwards or forwards step, e.g.:

```
TRACK  SIDE A   TOTAL    TIME                    dcc
  --       25:32  tot2
         L ||||  ||||  ||||
DIGITAL  R
         -dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```
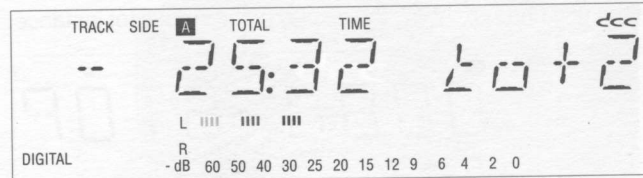
During the PREVIOUS and NEXT function, the unit automatically responds to different markers on the tape and to the beginning and the end of the cassette (for better understanding see chapter 'MARKERS').

Winding / finding a music part

With the **REWIND** and **WIND** keys, you can wind the cassette to the beginning or the end of the side with max. speed (in 'STOP').

In 'PLAY' you can find a particular part of a music track.

Note: Regardless on which side of the cassette you are on, the tape always plays forward when the **WIND** key is pressed.

● If the **REWIND** or the **WIND** key is called from 'STOP', the tape is wound backward or forward.

● If the **STOP** key is pressed while the tape is being wound forwards or backwards or if the cassette is wound to the end of a side, the unit is switched to 'STOP'.

● If the **REWIND** or **WIND** key is pressed in 'PLAY', the tape is wound in the corresponding direction as long as you keep the key pressed. When you release it, 'PLAY' is resumed.

During this function, the unit automatically responds to different markers on the tape and to the beginning and the end of the cassette (for better understanding see chapter 'MARKERS').

To select the side

You can select the side of the cassette by pressing the **SIDE A-B** key.
This function can only be selected in 'STOP', 'PLAY', 'WIND' and 'REWIND'.

1. To repeat the current music track

● Press the **PREVIOUS** key.
The tape is wound back to the beginning of the current music track.

● In 'PLAY', playback of the current music track starts immediately.

● In 'STOP', you have to start playback of the current music track with the **PLAY** key.

The display shows for instance:

```
TRACK SIDE [A]  TOTAL      TIME              dcc
  3        8:37      to    3
DIGITAL
```
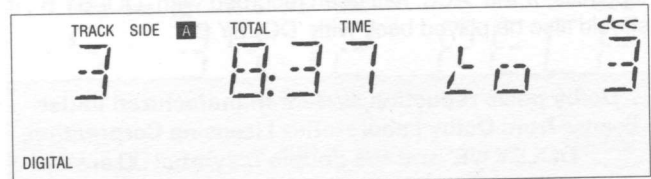
2. Repeat in 2 different modes

The **REPEAT** key can only be pressed in 'PLAYBACK' and 'STOP' and switches between 2 different repeat modes. By pressing the same key once again, the next mode is called.

Example:

OFF → TRACK REPEAT → REPEAT CONT → OFF

● Off (no indication)

● Press the **REPEAT** key (= TRACK REPEAT).
After the playback has finished the unit repeats the current music track until you stop this function (works only with 'DCC').
The display shows for instance:

```
TRACK SIDE [A]  TOTAL      TIME              dcc
  3       13:25     PLAY
TRACK REPEAT   L ||||||||||||||
DIGITAL        R ||||||||||||||
              -dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```
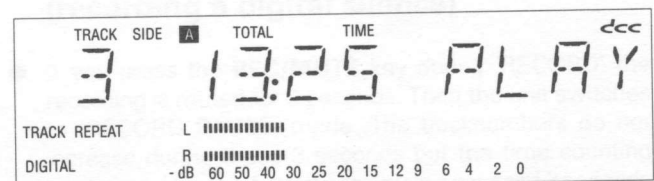
● Press the **REPEAT** key again (= REPEAT CONT).
The unit repeats the entire cassette without interruption until you stop this function.
The display shows for instance:

```
TRACK SIDE [A]  TOTAL      TIME              dcc
  3       13:25     PLAY
REPEAT CONT   L ||||||||||||||||
DIGITAL        R ||||||||||||||||
              -dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```
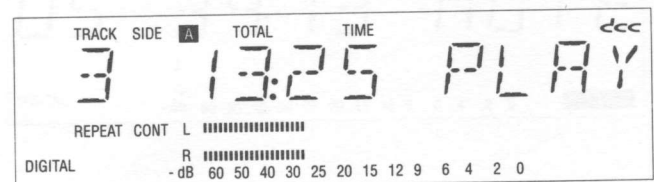
● Press the **REPEAT** key again (= OFF).

3. Dolby Noise Reduction (NR)

Dolby only works with ACC

With the **DOLBY B/C NR** key you can choose between 2 different modes. Either 'DOLBY B' or 'DOLBY C'. To call the next mode, press the same key again.

Example:

OFF → DOLBY B → DOLBY C → OFF

'DOLBY NR' is a noise reduction system, which can suppress tape hiss. If the 'ACC' has been recorded with 'DOLBY B', it should also be played back with 'DOLBY B'.

> Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation. 'DOLBY NR' and the double D symbol ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.

4. Markers

During 'PLAYBACK' the unit automatically responds to various markers and to the beginning of the cassette (for better understanding see chapter 'MARKERS').

5. Headphones

The 'DCC 380' has a headphone connection at the front, suitable for 6,3 mm 'JACK PLUG'.If your headphones are equipped with such a plug, you can connect it to the jack. Adjust the volume by means of the **VOLUME** adjusting knob.

Remember: The prerecorded DCC and the ACC can not be used for recording!

There are two different ways to start the recording. The following is the easier method.

We advise to use the following method if you want to

- make a recording on a blank DCC,
- resume a recording on a partially recorded DCC,
- completly overwrite an already recorded DCC.

This procedure will ensure the correct recording of time and tracknumbers on the tape.

The two major controls that are used to make a recording are the **APPEND** and **REC/MUTE** keys.

- Switch the unit on.
- Open the cassette compartment.
- Correctly insert the cassette.
- Close the cassette compartment.
- The unit automatically identifies the inserted cassette.

- Press the **APPEND** key.

The 'APPEND' function can only be called from 'STOP' or 'RECORD PAUSE' mode.
The deck searches for the start of the tape or for the end of the last recording.
The display shows:
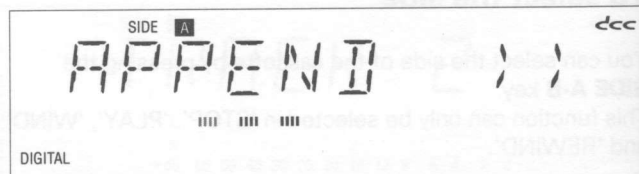
- If the 'DCC' is new or blank, the unit rewinds to the beginning of the cassette, to write a 'LEAD IN MARKER' (see chapter 'MARKERS') on the tape.

- If you want to overwrite a 'DCC', the tape has to be rewound to the beginning (before the 'LEAD IN MARKER') before you press the **APPEND** key (see chapter 'MARKERS').

- If you want to add a recording to a partially recorded DCC make sure that the tape is not at the very beginning but after the 'LEAD IN MARKER' before you press the APPEND key (see chapter 'MARKERS'). When a suitable position has been found, the unit plays the last few seconds of the previous recording. This function permits you to control the position. If the position is not the desired one, press again the **APPEND** key.

English

The display shows for instance:

```
TRACK SIDE A    TOTAL      TIME                    dcc
 5    12:12  PLAY
                    L ||||||||||||||
DIGITAL             R ||||||||||||||
                    -dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```

```
TRACK SIDE A    TOTAL      TIME                    dcc
APPEND  PLAY
                    L |||||||||||
DIGITAL             R |||||||||||
                    -dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```
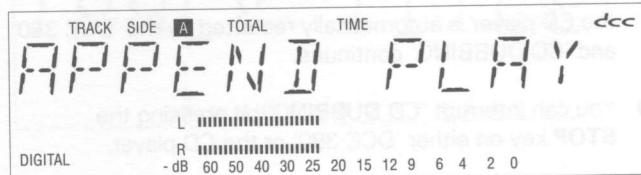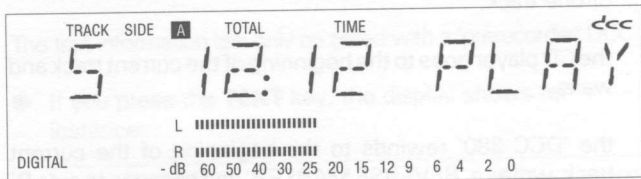
● The unit is then switched to 'RECORD PAUSE'.
The display shows for instance:

```
TRACK SIDE A               TIME                    dcc
 1        0:00  RECP
                    L
DIGITAL             R
                    -dB 60 50 40 30 25 20 15 12 9  6  4  2  0     RECORD
```
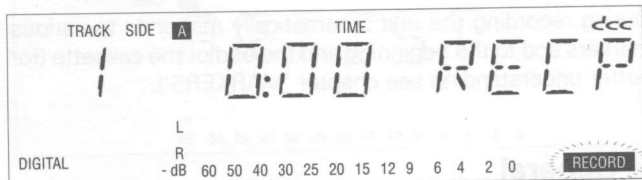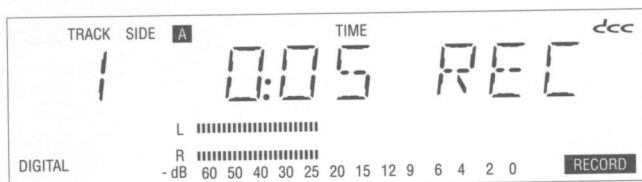
● Select the recording source.

● By pressing the **DIGITAL ANALOGUE** key you can choose the type of the recording source, from which you want to record (digital or analogue signals). The change-over can be carried out in any function, except during a recording.

If the analog input is selected, it has to be manually adjusted by means of the **REC. LEVEL** adjusting knob. Set the **REC. LEVEL** knob so that the red part of the level control briefly lights up only during dynamic passages.

It is recommended always to use the digital input when it is available. You then do not have to adjust the recording level and recording of correct tracknumbers will take place automatically.

● From this position, you can use the **REC/MUTE** key to start a recording. At the beginning of the recording, a 'START MARKER' is automatically written (see chapter 'MARKERS'). The time is constantly recorded and the track number automatically increased by one.
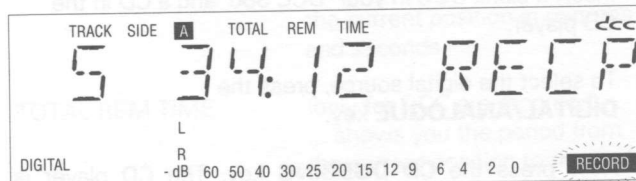The display shows for instance:

```
TRACK SIDE A               TIME                    dcc
 1        0:05  REC
                    L |||||||||||||
DIGITAL             R |||||||||||||
                    -dB 60 50 40 30 25 20 15 12 9  6  4  2  0     RECORD
```

● To stop the recording for a short time, press the **REC. PAUSE** key.
By pressing the **REC/MUTE** key again, the recording is resumed.

● To stop the recording, press the **STOP** key.
The actual recording stops immediately. The deck continues to write a marker for a short period to mark the end of the last recording.

1. To start a recording from the 'RECORD PAUSE' mode

We advise to use the following method if you want to make a recording on a specific location of the tape (e.g. overwriting one track).

● Find first the position on the cassette from where you want to continue recording.

● Press the **REC. PAUSE** key to enter the 'RECORD PAUSE' mode.

```
TRACK SIDE A    TOTAL REM  TIME                    dcc
 5        34:12  RECP
                    L
DIGITAL             R
                    -dB 60 50 40 30 25 20 15 12 9  6  4  2  0     RECORD
```

● Press the **REC/MUTE** key.
The display shows for instance:

```
TRACK SIDE A               TIME                    dcc
 1        0:00  REC
                    L |||||||||||||
DIGITAL             R |||||||||||||
                    -dB 60 50 40 30 25 20 15 12 9  6  4  2  0     RECORD
```

● A 'START MARKER' is automatically written at the beginning of the recording (see chapter 'MARKERS').

• If the previous track number is known, the new track number is correctly recorded.
• If the previous track number is not known, '- -' is shown. In this case, please refer to chapter 'RENUMBER'

2. Record muting (recording a digital silence)

● If you press the **REC/MUTE** key during 'RECORD' the recording is muted for 3 seconds. Then the unit switches to 'RECORD PAUSE' mode. The tracknumbers do not increase during these 3 seconds but the time counting continues. Use this function to obtain a pause of 3 seconds between the tracks.
The display shows for instance:

```
TRACK SIDE A    TOTAL REM  TIME                    dcc
05        34:13  MUTE
                    L
DIGITAL             R
                    -dB 60 50 40 30 25 20 15 12 9  6  4  2  0     RECORD
```

3. CD Dubbing

If both 'DCC 380' and the CD player 'CD 340' are connected to the EASYLINK BUS of the receiver 'FR 380', you can synchronize the start of the recording with the start of the CD by using **CD DUBBING**.

Using digital source:

● Be sure that the 'DIGITAL OUT' socket of the CD player is connected to the 'DIGITAL IN' socket of your 'DCC 380'.

● Insert a blank DCC in your 'DCC 380' and a CD in the CD player.

● To select the digital source, press the **DIGITAL/ANALOGUE** key.

● Now press the **CD DUBBING** key. The CD player is automatically started by the 'DCC 380'. The recording of the music tracks, the absolute time and the track numbers starts immediately.

Using analogue source:

● Be sure that the DCC REC (L/R) sockets of the receiver are connected to the ANALOG REC (L/R) sockets of your 'DCC 380'.

● Insert a blank DCC in the 'DCC 380' and a CD in the CD player.

● To select the analogue source, press the **DIGITAL/ANALOGUE** key.

● Now press the **CD DUBBING** key. The CD player is automatically started by the 'DCC 380'. The recording of music tracks, absolute time and track numbers starts immediately. The track number is automatically increased by one, providing that the digital silence between the tracks on the CD is longer than 4 seconds.

Notes:

● If you press the **CD DUBBING** key while the CD player is switched off or switched on but with no CD inserted, the 'DCC 380' waits for 10 seconds. Then the display panel shows:
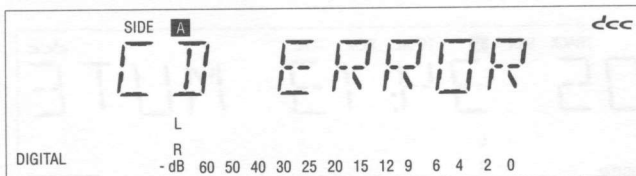
See also 'TROUBLESHOOTING'.

● If you want to add a recording to a partially recorded DCC, press the **APPEND** key before you start CD DUBBING in order to get a correct tracknumbering. The 'APPEND' function searches for the next possible recording position (see 'APPEND'). If the remaining time of the DCC is less than the total playing time of the CD, the CD will not be completely recorded.

● If the end of side A of the DCC is reached during recording of one track:

● the CD player goes to the beginning of the current track and waits,

● the 'DCC 380' rewinds to the beginning of the current track, writes a 'REVERSE MARKER' and changes to side B,

● the CD player is automatically restarted by the 'DCC 380' and 'CD DUBBING' continues.

● You can interrupt 'CD DUBBING' by pressing the **STOP** key on either 'DCC 380' or the CD player.

4. Markers

During recording the unit automatically responds to various markers and to the beginning and the end of the cassette (for better understanding see chapter 'MARKERS').
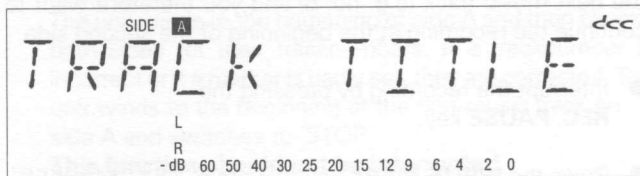
5. General

• Track and time information will not be recorded when the recording is done in the middle of a blank area on the tape with the use of the **REC.PAUSE** key. A correction of the tracknumbering with **RENUMBER** is not possible (see chapter 'RENUMBER').

• To correct possible mistakes on the display, press **RENUMBER** key after the last recording (see chapter 'RENUMBER').

• For a precise record control, reset the tape counter to '0000' by pressing the **RESET** key.

• During 'RECORD PAUSE', the unit constantly tests the input signals. The copy protection is only tested when 'DIGITAL' has been selected. If the chosen record source is copyrighted, recording cannot be started (see also 'TROUBLESHOOTING').

• If 'DIGITAL' has been selected, the unit checks if a digital source has been connected. If the digital source is missing (e.g. bad cable connection), recording can not be started.
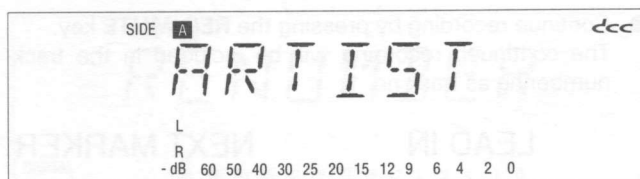
Text

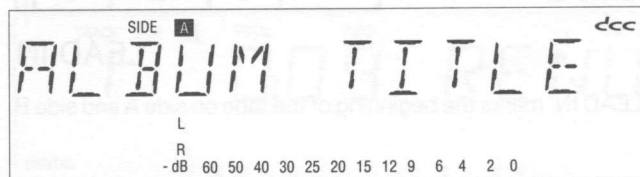The text information can only be called with a 'prerecorded DCC'.

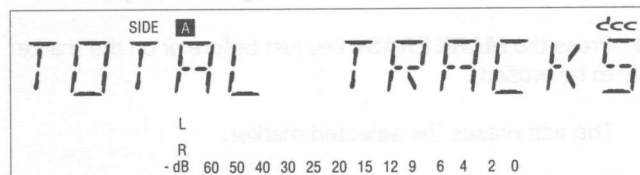● If you press the **TEXT** key, the display shows for instance:

```
SIDE A                                    dcc
TRACK TITLE
L
R
- dB  60 50 40 30 25 20 15 12 9  6  4  2  0
```

● If you press the **TEXT** key again, the display shows for instance:

```
SIDE A                                    dcc
ARTIST
L
R
- dB  60 50 40 30 25 20 15 12 9  6  4  2  0
```

● If you press the **TEXT** key again, the display shows for instance:

```
SIDE A                                    dcc
ALBUM TITLE
L
R
- dB  60 50 40 30 25 20 15 12 9  6  4  2  0
```

● If you press the **TEXT** key again, the display shows for instance:

```
SIDE A                                    dcc
TOTAL TRACKS
L
R
- dB  60 50 40 30 25 20 15 12 9  6  4  2  0
```

Time

The 'DCC 380' takes the time in 3 different ways. By pressing the **TIME** key, you can successively call the following time information.

TIME	... shows you the period from the beginning of the track to the current position in minutes and seconds.
TOTAL TIME	... shows you the period from the beginning of the cassette to the current position in minutes and seconds.
TOTAL REM TIME	(only for DCC pre-recorded) ... shows you the period from the current position to the end of the cassette in minutes and seconds.
COUNTER	... shows you the period from the beginning of the cassette to the current position.
REM TIME	... shows you the period from the current position to the end of the side in minutes and seconds. This information can only be called during 'RECORD' or in 'RECORD PAUSE'.

Reset

Pressing the **RESET** key resets the counter to '0000'. When the display is not in the counter mode at the moment this key is pressed, it will show the counter setting 0000 for a few seconds and then return to the original display mode.

13

Markers are special signals on the DCC tape, marking certain positions. Markers can be set automatically or manually. No makers can be set on an 'ACC'.

The most frequent markers are:

- START MARKER
- REVERSE MARKER
- NEXT SIDE MARKER

Start marker

A 'START MARKER' marks the beginning of a music track. If this marker is written, you can easily find the beginning of the required music track.

- When you start recording, a 'START MARKER' is automatically set.

- To manually write a 'START MARKER' press the **WRITE MARK** key during playback or recording. It will mark the beginning of a music track.

Caution: When you write a 'START MARKER', the tracknumbering will no longer be correct. By pressing the **RENUMBER** key you can include the new marker into the tracknumbering.

Reverse marker

A 'REVERSE MARKER' marks the end of the last music track on this side.

You notice that there is no more room on the current side for the next music track (e.g. no.6) and you therefore want to change the side.

- Interrupt the recording by pressing the **REC. PAUSE** key.

- Press the **SIDE A-B** key.
  The unit writes a 'REVERSE MARKER' and **immediately changes the side**. The tape will **not** be wound to the beginning of side B (see illustration).

- Continue recording by pressing **REC/MUTE** key.
  The continued recording will be included in the tracknumbering as track no. 6.

LEAD IN   REVERSE MARKER

| Side A	1	2	3	4	5
Side B		9	8	7	6
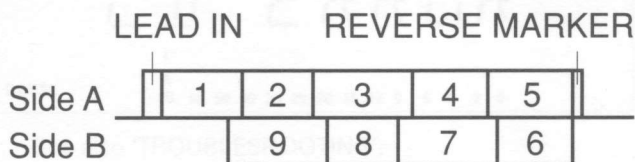
'LEAD IN' marks the beginning of the tape on side A.

Next marker

A 'NEXT MARKER' marks the end of the last music track on this side.

You notice that there is no more room on the current side for the next music track (e.g. no. 6) and you therefore want to continue the recording at the beginning of the second side.

- Interrupt the recording by pressing the **REC. PAUSE** key.

- Press the **WRITE MARK** key to write a 'NEXT MARKER'. The unit writes a 'NEXT MARKER', winds to the end of the tape, changes the side and writes a 'LEAD IN MARKER' (see illustration).

- Continue recording by pressing the **REC/MUTE** key. The continued recording will be included in the tracknumbering as track no. 1.

LEAD IN   NEXT MARKER

Side A	1	2	3	4	5
Side B		4	3	2	1
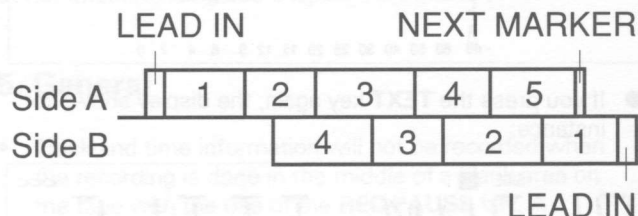
                                    LEAD IN

'LEAD IN' marks the beginning of the tape on side A and side B.

Marker erase

- Find the marker to be erased using the display.

- Press the **MARK ERASE** key just before or on the marker to be erased.

  The unit erases the selected marker.

  If the unit does not find a marker within 2.5 seconds, it switches to the previous mode ('PLAY' or 'STOP').

- After you have erased a marker the sequence of tracknumbers has been changed. Press the **RENUMBER** key to correct the tracknumbering.

English

Select the 'RENUMBER' function to update the sequence of tracks of the 'DCC', when the correct sequence of tracknumbes has been changed due to adding an extra startmarker or erasing a startmarker.
Caution: This process may take a few minutes.

● Press the **RENUMBER** key only for 'DCC user-recorded'. The unit winds to the beginning of side A and then checks both sides for their tracknumbers. If a tracknumber is incorrect or if a marker is badly set, they are corrected. The unit winds to the beginning of the first music track on side A and switches to 'STOP'.
This function should not be interrupted.
The audio signal is muted.

While the cassette is being rewound to the beginning, the display panel shows:

If the unit began with the function 'RENUMBER', the display shows for instance:

Maintenance

● Pull the mains plug out.

● Clean the 'DCC 380' with a damp cloth.

● Clean reflecting surfaces (e.g. the display panel or the head of the remote control) with a gentle window cleanser.

Cleaning cassettes

● In principle there is no need to clean the head of your DCC player if you use only DCC cassettes.
The use of conventional compact cassettes of inferior quality may leave dirt on the DCC head. This can affect the sound quality of DCC cassettes.

● Special DCC cleaning cassettes are available to clean the DCC head.

● It is strongly advised not to use conventional compact cleaning cassettes as they will not clean the DCC head well enough.

> **Only use special 'DCC cleaning cassettes' for your 'DCC 380'!**
> **Do not use demagnetizing cassettes!**

Problems with the whole system

If a fault occurs, read the points below before taking your 'DCC 380' for repair.

Electrostatic charge may cause unexpected symptoms, e.g. the unit does not respond to any command.

To reset the unit:
● Switch off the power by pressing the **POWER STANDBY/ON** key.

● Switch on the power on again after a few seconds.

> **WARNING**
> If these remedies fail to help, consult your dealer, taking the **'DCC recorder and the cassette'** (with which the fault occured) with you.
> **Under no circumstances** should you try to **repair the unit yourself** as that would invalidate the guarantee.

English

(subject to modification)

Inputs   **Digital In:**

AES/EBU format: according IEC958
sampling frequency: 32 / 44.1 / 48 kHz
unbalanced cinch: 75 Ohm

Analog In:

cinch: unbalanced
input impedance: 50 kOhm
sampling frequency: 44.1 kHz
input sensitivity: 150 mVrms
max. input voltage: 2,5 Vrms

Outputs   **Digital Out:**

AES/EBU format: according IEC958
sampling frequency: 32 / 44.1 / 48 kHz
unbalanced cinch: 75 Ohm

Analog Out: **DCC playback**

output voltage: 2 Vrms +/- 2 dB
frequency response: 20 Hz...20 kHz +/- 0,5 dB
channel separation: 88 dB (1kHz)
THD+N: 86 dB (1 kHz)
SNR: 90 dB
wow and flutter: quartz crystal precision

Analog Out: **ACC playback**

output voltage: 0,8 Vrms +/-50 mVrms at 200 nW/m
frequency response: 40 Hz ... 14kHz (<3 dB)
channel separation: 26 dB (related tracks)
THD: 2 %
SNR: Dolby OFF 55 dB
                                         Dolby B 64 dB
                                         Dolby C 73 dB
wow and flutter: 0,2 %

Headphone Out: **DCC playback**

output power: 48 mW / 600 Ohm
frequency response: 20 Hz...20 kHz +1 dB -2 dB
channel separation: 75 dB (1 kHz)
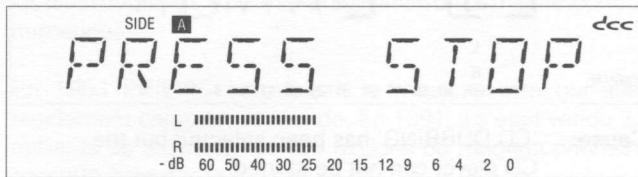SNR: 86 dB

What appears to be a malfunction may not always be serious.
Make sure first ...

1.

```
SIDE A                                    dcc
PRESS STOP
L |||||||||||||||
R |||||||||||||||
-dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```
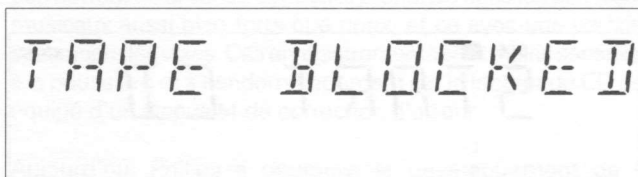
Cause: You have pressed a key during a function which
can not respond to this key.

Solution: Press the **STOP** key.

2.

```
TAPE BLOCKED
```
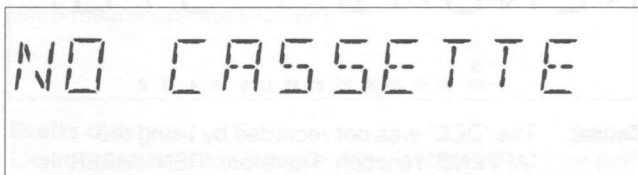
Cause: For some reason, the compartment cannot be
openend or closed (e.g. cassette not correctly
inserted, compartment touched an object when it
was opened).

Solution: • Be sure to correctly insert the cassette in the
cassette compartment.
• Ensure that the compartment has sufficient
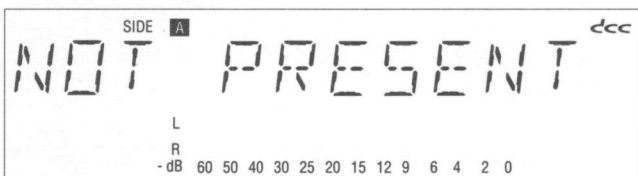clearance for opening and closing.

3.

```
NO CASSETTE
```

Cause: The compartment has been closed without
containing a cassette.

Solution: Close the compartment after you have inserted a
cassette.

4.

```
SIDE A                                    dcc
NOT PRESENT
L
R
-dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```
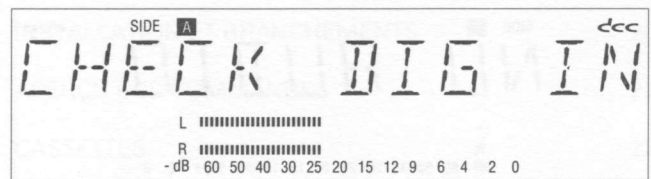
Cause: The selected track number does not exist.

Solution: Enter an existing track number.

Cause: The required music track does not exist, playback
is continued.

Solution: Select another music track.

5.

```
SIDE A                                    dcc
CHECK DIG IN
L |||||||||||||||
R |||||||||||||||
-dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```

Cause: The CD player does not send any signal in 'STOP'
mode.

Solution: Set the CD player into 'PAUSE' mode.

Cause: The digital source has failed (i.e. loosened cable),
the unit is switched to STOP.

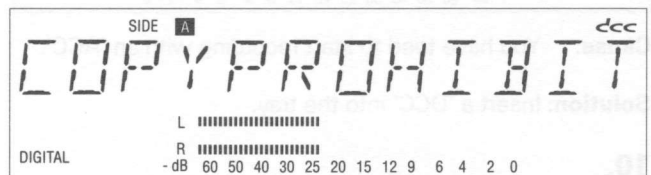**Solution:** Check the connections and try again.

Cause: 'Digital' has been selected at the unit. If the
digital source is missing, recording can not be
started.

Solution: Check the connections and try again.

Cause: Some CD players do not send a digital signal
according to EBU standard.

Solution: Contact the corresponding service organisation
for your CD player.

6.

```
SIDE A                                    dcc
COPYPROHIBIT
L |||||||||||||||||||||
DIGITAL    R |||||||||||||||||||||
-dB 60 50 40 30 25 20 15 12 9  6  4  2  0
```

Cause: The copy protection has detected that this
recording is not permitted (record source
copyrighted).

The 'DCC 380' operates with a Serial Copy
Management System, which includes that a fully
digital copy can be made from prerecorded digital
material **but only** directly from the original
material.

Solution: Recording can only be made via the analogue in
and output sockets.

DCC 380