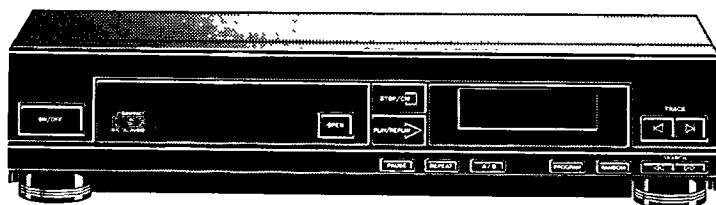




CONSUMER ELECTRONICS

**PHILIPS**



CD 210

Compact Disc Player

# Operating Instructions

## SITING THE COMPACT DISC PLAYER

### INTRODUCTION

The Compact Disc system is a major step forward in the sphere of audio technology. By employing the most sophisticated digital and optical technologies, Compact Disc not only produces the ultimate in sound reproduction, it also offers unprecedented ease of operation, with rapid access to every track on the disc and the possibility of programming.

#### Remote control

This Compact Disc player can be operated remotely if it is connected to a PHILIPS HiFi system with remote control.

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### INSTALLATION

#### CHECKING THE POWER SUPPLY SETTING

(Fig. 1)

- Check that the type plate on the rear of your player indicates the correct supply voltage.
- If your mains supply voltage is different, consult your dealer or our Service Organisation.

#### REMOVING THE TRANSIT CLAMPS (Fig. 2-3)

The two red transit clamps on the bottom lock the play mechanism to protect it during transportation.

- Turn the player upside down.
- Turn the clamps anti-clockwise and remove them from the player.
- Store them in the recesses provided.

Replace the clamps if you wish to transport the player. To do this, turn the player upside down, insert the clamps in the holes provided and rotate them clockwise until they lock in position.

#### Free-standing

- Always position the player horizontally on a flat, firm surface.
- Allow a free space of at least 3 cm above the player so as not to interfere with the cooling of the player.

#### In an audio rack

- The player can be sited in any desired position.

#### Stacked

- Site the player preferably at the bottom or at the top.
- Never position the player directly on top of a high-power amplifier, as such an amplifier gives off a substantial amount of heat.

#### Warning

Never allow the player to stand for long periods in direct sunlight or near a heat source.

#### CONNECTIONS (Fig. 4)

- a Connection for the mains lead.
- b **OUT L R:** for the connecting cable to the amplifier.
  - Insert a red plug into the 'R' socket (right-hand channel) and the other plug into the 'L' socket (left-hand channel).
  - Insert the two other plugs into the corresponding sockets of the CD or AUX input of your amplifier. You can also use the TUNER or TAPE IN connection, but *never* the PHONO input. This is not suitable for Compact Disc reproduction.
- c **RC5 IN/OUT:** for a remote control system.
  - Use these sockets for connecting up the equipment when you are incorporating the player in a PHILIPS HiFi-system with its own remote control system.

#### Fitting a Mains Plug

The wires in the mains lead are coloured:

Blue - Neutral Brown - Live

As these colours may not correspond with the colour markings identifying the terminals in your plug proceed as follows:

The Brown wire must be connected to the terminal which is marked with the letter L or coloured Red. The Blue wire must be connected to the terminal which is marked with the letter N or coloured Black.

**Note:** This apparatus must be protected by a 3 amp fuse if a 13 amp plug is used, or, if any other type of plug is used, by a 5 amp fuse either in the plug or adapter, or at the distribution board. If in doubt consult a qualified electrician.

## OPERATION

### EXPLANATION OF KEYS ETC. (Fig. 5)

#### 1 ON/OFF

- › For switching on and off.

#### 2 OPEN

- › For opening the disc tray.

#### 3 PLAY/REPLAY

- › For starting play (PLAY).
- › For returning to the beginning of a track (REPLAY).

#### 4 STOP/CM

- › For stopping play (STOP).
- › For erasing a programme (CM = Clear Memory).

#### 5 DISPLAY

- › Informs you about the functioning of the player.
  - › Displays details from the disc's track list.
- See also: 'The indications on the display'.

#### 6 TRACK

- › For selecting another track during play.
  - › For selecting the track number you want play to begin with.
  - › For selecting track numbers when compiling a programme.
- ('L' from high to low and 'R' from low to high.)

#### 7 PAUSE

- › For briefly interrupting play.
- › For holding play at the start of a disc, track or passage.

#### 8 REPEAT

- › For repeating a disc or a programme.

#### 9 A/B

- › For setting the starting and stopping point of a passage to be repeated.

#### 10 PROGRAM

- › For storing track numbers in a programme.
- › For erasing track numbers from a programme.
- › For checking a programme.

#### 11 RANDOM

- › For playing in random order.

#### 12 SEARCH

- › For fast search to a particular passage during play.
- ('L' backwards, 'R' forwards.)

### THE INDICATIONS ON THE DISPLAY (Fig. 6)

Each Compact Disc has, along with the music, a list detailing the numbers of the tracks, the playing time of each track and the total playing time of the disc. The player always scans this first and stores it in its memory in order, for instance, to provide information via the display.

- 
- › Light up when you switch the player on.

#### TRACK

Under this indication you will see:

- › The number of the track which is playing.
- › The number of tracks on the disc after it has stopped.

#### ▷

- › Lights up when you close the tray.
- › Flashes when the player is in the pause mode.

#### MIN SEC

Under these indications you will see:

- › The elapsed playing time of the track which is playing.
- › The total playing time of the disc after it has stopped.

#### 1-20/+20

- › Shows the number of tracks on the disc after the track list has been scanned.
- › Gives information on how play proceeds.

#### ERROR

- › Lights up briefly when you make an error in operating.

#### 8

- › Flashes during the scanning of the disc's track list.
- › Lights up when a 8-cm disc is played.

#### 12

- › Flashes during the scanning of the disc's track list.
- › Lights up when a 12-cm disc is played.

#### A-B

- › 'A' lights up when the starting point of a passage to be repeated is set.
- › 'B' lights up when the stopping point of that passage is set.

#### REPEAT

- › Lights up when you repeat a disc or programme.

#### REVIEW

- › Lights up when you check a programme.

#### RANDOM

- › Lights up when you play a disc in random order.

#### PROGRAM

- › Lights up when you store the first track number of a programme.

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### SWITCHING ON AND OFF (ON/OFF)

#### Switching on

- Press ON/OFF.
- › The display lights up.

#### Switching off

- Press ON/OFF again.
  - › The display is extinguished.
-

## LOADING AND UNLOADING THE DISC (OPEN)

### Loading (Fig. 7-9)

- Open the disc tray by pressing OPEN.
- Insert the disc into the tray *printed side up*.
- Close the tray in the manner indicated in the various sections.

If 'ERROR' lights up after the tray is closed, this means that you have loaded the disc upside down or it is dirty, badly scratched or faulty, for example warped. 'ERROR' also lights up if you close an empty tray.

### Unloading

- Open the tray by pressing OPEN.
  - Hold the disc in same way as when loading.
  - Store the disc immediately in its holder. This prevents soiling and damage.
  - Close an empty tray by pushing it lightly.
- Avoid leaving the tray open, to prevent dust from entering.

## PLAYING THE ENTIRE DISC (PLAY/REPLAY)

- Close the tray by pushing it lightly or by pressing PLAY/REPLAY.
  - › The '▷' indication lights up.
  - › The '8' and '12' indications flash alternately until the disc's track list has been scanned.
  - › Dependent on the size of the disc, the '8' or '12' indication lights up.
  - › On the track number matrix '1-20' as many numbers remain lit as there are tracks on the disc.
  - › '1' appears under 'TRACK'.
  - › Play starts as soon as the elapsed playing time of the first track number is shown.
  - › At the end of each track its number disappears from the track number matrix and the number of the next track appears under 'TRACK'.
  - › The display of the playing time starts again at '0:00' after any preceding pause has been counted off.
  - › After the last track the disc stops.
    - The '▷' indication goes out.
    - The display shows the number of tracks and the total playing time of the disc.

### Important!

If a disc with more than twenty tracks is played, the '+20' indication remains lit after the twentieth track has ended to show that there is still a number of tracks to follow. However, their numbers are no longer shown on the track number matrix, but appear under 'TRACK'.

## GOING BACK TO THE BEGINNING OF A TRACK (PLAY/REPLAY)

- Press PLAY/REPLAY.
  - › The track starts again from the beginning.

## SELECTING ANOTHER TRACK DURING PLAY (◀ TRACK ▶)

- Press TRACK ▶ or ◀ TRACK until the required track number appears under 'TRACK'.
  - › The playing time indication disappears.
  - › Play is interrupted when selecting is finished.
  - › As soon as the playing time indication returns, the selected track begins to play.

If you press TRACK ▶ during the last track or ◀ TRACK during the first track, then 'ERROR' will light up and play will continue as normal.

## SEARCHING FOR A PARTICULAR PASSAGE DURING PLAY (◀ SEARCH ▶)

- Hold ◀ SEARCH down to search backwards to the beginning.
- Hold SEARCH ▶ down to search forwards to the end.

As soon as the key is released play restarts at once. The length of time for which you hold the key down determines the search speed:

- the first three seconds relatively slowly;
- after approx. four seconds slightly faster;
- the highest speed is reached after approx. seven seconds.

At the first two speeds the sound of the disc remains audible, although accelerated. When searching by ear it is therefore advisable to release the key as soon as the sound disappears. If you have pressed PAUSE before you started the search, you will hear nothing.

As soon as you reach the beginning of the first track, 'ERROR' lights up. Play will resume there as soon as you release the key. If you reach the end of the last track, 'ERROR' will also light up. If you then release the key, play will resume a few seconds before the end of the disc.



## BEGINNING WITH A TRACK NUMBER OTHER THAN THE FIRST (TRACK ▶ and PLAY/REPLAY)

- Place the disc in the tray, but *do not* close it yet!
- Press TRACK ▶ until the required track number appears under 'TRACK'.
- Close the tray by pushing it lightly or by pressing PLAY/REPLAY.
  - › The indications '▷' and '8' or '12' light up.
  - › On the track number matrix '1-20' the numbers preceding the selected track number go out.
  - › As soon as the elapsed playing time appears, play starts from the selected track.

### Important!

If you have selected too high a track number, 'ERROR' will light up after the track list has been scanned and play will not start.

## PLAYING THE DISC IN RANDOM ORDER (RANDOM)

- Close the tray by pressing RANDOM.
- › The 'RANDOM', '▷' and '8  or '12  indications light up.
- › On the track number matrix '1-20' as many numbers remain lit as there are tracks on the disc.
- › All the tracks on the disc are played in a sequence to be determined by the player. The number under 'TRACK' jumps on each time, but on the track number matrix all the numbers remain lit.
- › When all the tracks have been played the disc stops.  
The 'RANDOM' and '▷' indications go out.  
The display shows the number of tracks and the total playing time of the disc.

During play you can return to a track which has already been played by pressing **K** TRACK. If you press TRACK **N** you are selecting any one of the following tracks.

You can stop random order play at any time by pressing RANDOM again. The remainder of the disc, from the track which is playing onwards, is then played in the normal sequence.

By pressing REPEAT you can repeat random order play. The player then always begins with the same track, but otherwise changes the sequence every time the disc is repeated.

## BRIEFLY INTERRUPTING PLAYBACK/HOLDING PLAY AT THE START OF A DISC, TRACK OR PASSAGE (PAUSE)

### To briefly interrupt playback

- Press PAUSE.
- › The '▷' indication begins to flash.
- › The sound stops but the disc continues to spin.
- Press PAUSE again to restart.
- › The '▷' indication lights up continuously again.
- › Play restarts at the point where it was interrupted.

### Holding play at the start of a disc, track or passage

You can go to any place on the disc and hold it by pressing PAUSE before:

- starting to play the disc;
- going back to the beginning of a track;
- selecting another track;
- searching for a particular passage;
- beginning with a track other than the first one;
- playing the disc in random order.

Press PAUSE again to start play at the chosen place.

### Important!

An open tray is closed when PAUSE is pressed.

## REPEATING A PASSAGE DURING PLAY (A/B)

- Press A/B at the required starting point.
- › The 'A-' indication lights up.
- Press A/B again at the required stopping point.
- › The 'B' indication now also lights up.
- › The passage between the starting and stopping point will now be replayed continuously.
- Press A/B again to stop repeat.
- › The 'A-B' indication goes out.
- › The disc continues playing as normal to the end and then stops.

To find the required stopping point quickly you can use the **◀** SEARCH **▶** keys.



The repeating of a passage can also be stopped by pressing STOP/CM or OPEN.

## REPEATING THE DISC (REPEAT)

- Press REPEAT before or during playback.
- › The REPEAT indication lights up.
- Press REPEAT again to stop repeating.
- › The REPEAT indication goes out.
- › The disc will play on to the end and then stop.

Repeating can also be stopped by pressing STOP/CM or OPEN.

## STOPPING PLAYBACK (STOP/CM or OPEN)

- Press STOP/CM if you merely wish to stop.
- › The '▷' indication goes out.
- › The display shows the number of tracks and the total playing time of the disc.
- Press OPEN if you wish to stop and take out the disc.
- › The '▷' and '8  or '12  indications go out.
- › All numbers on the track number matrix and the '–' indications light up.

## PROGRAMMING

By programming the player you can play up to 20 tracks of a disc in any required sequence. Each track can however only be selected once. If you exceed the maximum of 20 tracks, 'ERROR' lights up.

### STORING A PROGRAMME

- Place the disc in the tray, but **do not** close it yet!
- Press TRACK  $\blacktriangle$  until the first track number you wish to programme appears under 'TRACK'.
  - › After the number appears a flashing dash.
- While the dash is flashing press PROGRAM.
- The dash will be replaced by 'P' (for Programme).
  - › All the numbers disappear from the track number matrix apart from the one selected.
  - › At the same time the PROGRAM indication will light up.
  - › That number has been stored.
- Display each of the other track numbers required using  $\blacktriangle$  TRACK or TRACK  $\blacktriangleleft$  and store them in the same way. They will appear successively on the track number matrix.

**Important** - The dash will flash for approx. 8 sec. each time. If you fail to press PROGRAM within that time, flashing will stop. You can then no longer store the number: instead of the 'P' you will see 'ERROR' light up - or the numbers already stored will appear if you press PROGRAM too late. You can however still store such a missed number by returning to it from the previous or the following number.

### For example:

On a disc you wish to listen to the numbers 7, 3, 9, 5, 12 and 10 in that sequence.

- Place the disc in the tray, but **do not** close it yet!
- Press TRACK  $\blacktriangle$  until '7-' appears under 'TRACK'.
  - Press PROGRAM.
    - › The PROGRAM indication will light up and under 'TRACK' you will now see '7 P' and on the track number matrix '7'.
  - Go back to '3-' using  $\blacktriangleleft$  TRACK.
  - Press PROGRAM again.
    - › You will now see '3 P' under 'TRACK' and on the track number matrix '3' and '7'.
  - Display the numbers 9, 5, 12 and 10 in turn by pressing TRACK  $\blacktriangle$  or  $\blacktriangleleft$  TRACK.
  - Store them by pressing PROGRAM after each one.
    - › When the last number has been stored '10 P' will be shown continuously under 'TRACK'. On the track number matrix you will read: '3' '5' '7' '9' '10' '12'.

## RECTIFYING A MISTAKE

- Go to another track number by pressing TRACK  $\blacktriangle$  or  $\blacktriangleleft$  TRACK.
- Return to the wrong one.
- Press PROGRAM while the 'P' after the number is flashing.
  - › The 'P' is replaced by a 'C' (for Clear).
  - › The number disappears from the track number matrix.
- Store the correct number.

In our example: you have stored '4' instead of '5'. Go to '3' using  $\blacktriangleleft$  TRACK, return to '4' using TRACK  $\blacktriangle$  and press PROGRAM. Now proceed to store '5'.



### CHECKING THE PROGRAMME

- Press PROGRAM if you wish to see the sequence in which you have stored the track numbers.
    - › The 'REVIEW' indication lights up.
    - › All the track numbers appear in the programmed sequence under 'TRACK'.
    - › The 'REVIEW' indication goes out again.
- In our example: '7' '3' '9' '5' '12' '10' '10 P'.  
If 'ERROR' lights up, this means that no track numbers have yet been stored.

### ERASING A TRACK NUMBER FROM THE PROGRAMME OR THE ENTIRE PROGRAMME

- Press TRACK  $\blacktriangle$  or  $\blacktriangleleft$  TRACK until the track number you wish to erase appears under 'TRACK'.
- Press PROGRAM while the 'P' after the number is flashing.
  - › The 'P' is replaced by a 'C' (for Clear).
  - › The number disappears from the track number matrix.
- Press STOP/CM if you wish to erase the entire program.
  - › All numbers on the track number matrix and the '←' indications light up again.

### PLAYING THE PROGRAMME

- Close the tray by pushing it lightly or by pressing PLAY/REPLAY.
  - › The first number of the programme appears under 'TRACK'; in our example: '7'.
  - › The indications '▷' and '8'  or '12'  light up.
  - › Play begins as soon as the elapsed playing time of the first track is shown.
  - › As play continues the following numbers in the sequence appear.
  - › The entire programme can be displayed in the programmed sequence by pressing PROGRAM. The 'REVIEW' indication will meanwhile be lit.

All keys, apart from RANDOM and A/B, can also be used while a programme is playing. Searching for a particular passage is limited to within the track being played. When either end of the track is reached 'ERROR' lights up. Once play has started the programme can no longer be changed.

When STOP/CM is pressed or when all the tracks of the programme have been played, the disc stops, but the programme remains stored: the track number matrix again shows all the numbers stored. The programme will be erased when you open the tray. It will also be erased if you press STOP/CM twice in succession *during playback*.

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## ADDITIONAL INFORMATION

### CARE OF THE DISCS

Although both sides of a disc are protected by a special coating, it is still advisable to treat the discs with care:

- Never leave discs lying around, put them back in their holders immediately after use.
- Never write on the printed side!
- Do not attach any stickers on the disc.
- Keep the shiny surface of the disc clean. Use a soft lint-free cloth and always wipe the disc in a straight line from centre to edge. You may breathe lightly on the disc first.

The cleaning set SBC 3540, available separately, is a useful accessory for cleaning your discs. It contains a protective support, a special disc cleaning cloth and a bottle of cleaning fluid.

**Warning** - Cleaning agents for conventional records are not suitable for cleaning a Compact Disc. Nor may detergents or abrasive cleaning agents be used.

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### PLAYER MAINTENANCE

A chamois leather slightly moistened with water is sufficient for cleaning the player. Do not use cleaning agents containing alcohol, spirits, ammonia or abrasives.

The disc tray should be kept free of dust with a dry cloth.

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## TECHNICAL DATA

### Typical Audio Performance

Frequency range: 20-20,000 Hz

Amplitude linearity:  $\pm 0.02$  dB (20-20,000 Hz)

Phase linearity:  $\pm 0.5^\circ$  (20-20,000 Hz)

Dynamic range:  $> 90$  dB (20-20,000 Hz)

Signal-to-noise ratio:  $> 100$  dB (20-20,000 Hz)

Channel separation: 100 dB (1 kHz)

Total harmonic distortion: 0.015% (1 kHz)

Wow and flutter: quartz crystal precision

D/A conversion: quadruple (176.4 kHz) oversampling with digital filter and two 16-bit D/A-converters

Audio output level:  $2 V_{\text{rms}}$

### Power supply

Mains voltage and frequency: see the type plate on the rear of the player

Power consumption: 18 W approx.

Safety requirements: IEC 65

### Cabinet

Material/finish: metal and polystyrene with decorative trim

Dimensions (w x h x d): 360 x 86 x 300 mm

Weight: 3.5 kg approx.

### Subject to modification

*This Compact Disc player complies with radio interference requirements as laid down in EC regulations.*

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## FAULTS AND THEIR LIKELY CAUSES

Insufficient familiarity with the combination of a new product and new discs may lead to faults arising during use. These are generally caused by simple errors in operation or external factors.

It is perhaps useful to check the points listed below and where possible remedy these before taking your player for repair.

- The transit clamps have not been removed.
- Condensation has formed on the lens of the laser due to a dramatic change in temperature. This will disappear automatically after some time.
- There is a foreign object in the disc tray.
- The disc has not been inserted with the printed side up or there is no disc in the tray.
- The disc is dirty, badly scratched or warped.
- The player has been connected to the PHONO socket of the amplifier.

If the fault remains, try to clear it by switching the player off and on.

If this also fails to help, do not continue experimenting, but remove the plug from the socket and consult your dealer.

Certain faults may be caused by a disc. In order to help determine the precise cause, take the disc with which the fault occurred with you when you take the player for repair.

***Under no circumstances should you repair the player yourself, as this will invalidate the guarantee!***

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