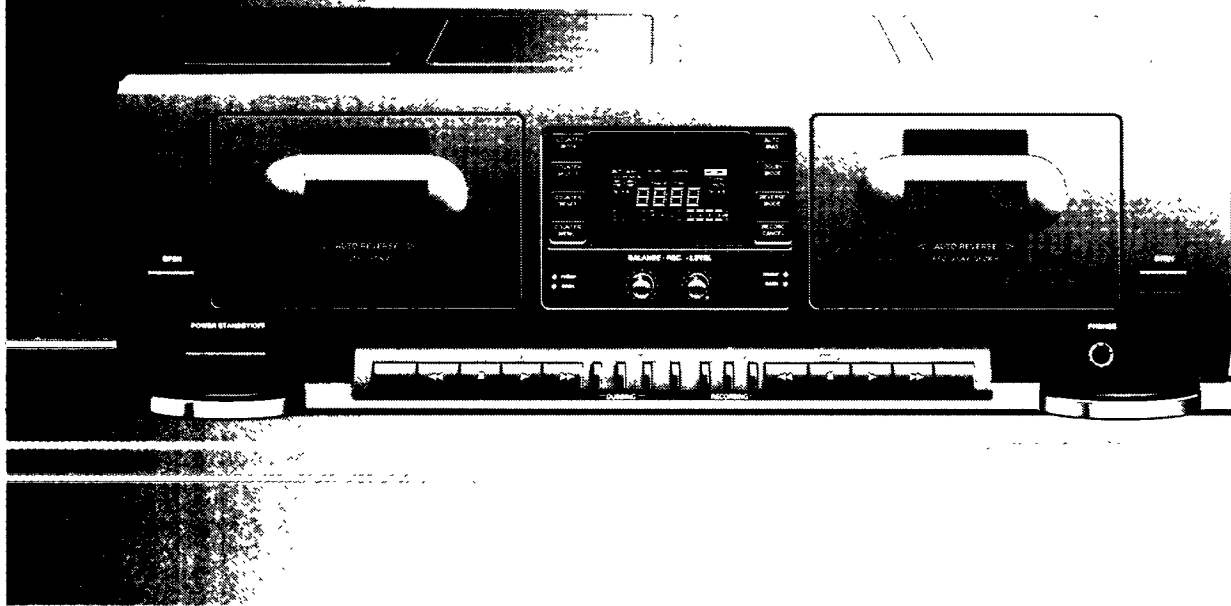


# PHILIPS



## FC 931



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# PHILIPS

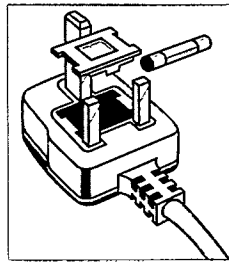


**Important notes for users in the U.K.:**

**Mains plug**

This apparatus is fitted with an approved moulded 13 Amp plug. To change a fuse in this type of plug proceed as follows:

- 1 Remove fuse cover and fuse.
- 2 Fix new fuse which should be a BS1362 5 AMP, A.S.T.A. or BSI approved type.
- 3 Refit the fuse cover.



If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place.

If the mains plug contains a fuse, this should have a value of 5 A. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5 A.

**Note:**

The severed plug must be disposed to avoid a possible shock hazard should it be inserted into a 13 A socket elsewhere.

**How to connect a plug**

The wires in the mains lead are coloured in accordance with the following code: blue = neutral (N), brown = live (L). As these colours may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:

- 1 Connect the blue wire to the terminal marked N or coloured blue or black.
- 2 Connect the brown wire to the terminal marked L or coloured brown or red.
- 3 Do not connect either wire to the earth terminal in the plug, marked E or  $\perp$  or coloured green or green-and-yellow.

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead - not simply over the two wires.

If in doubt, consult a qualified electrician.

**(MEX) Mexico** ..... **NOM**

Es necesario que lea cuidadosamente su instructivo de manejo.



**NOM**

**(N) Norge**

Typeskilt finnes bak på apparaten.

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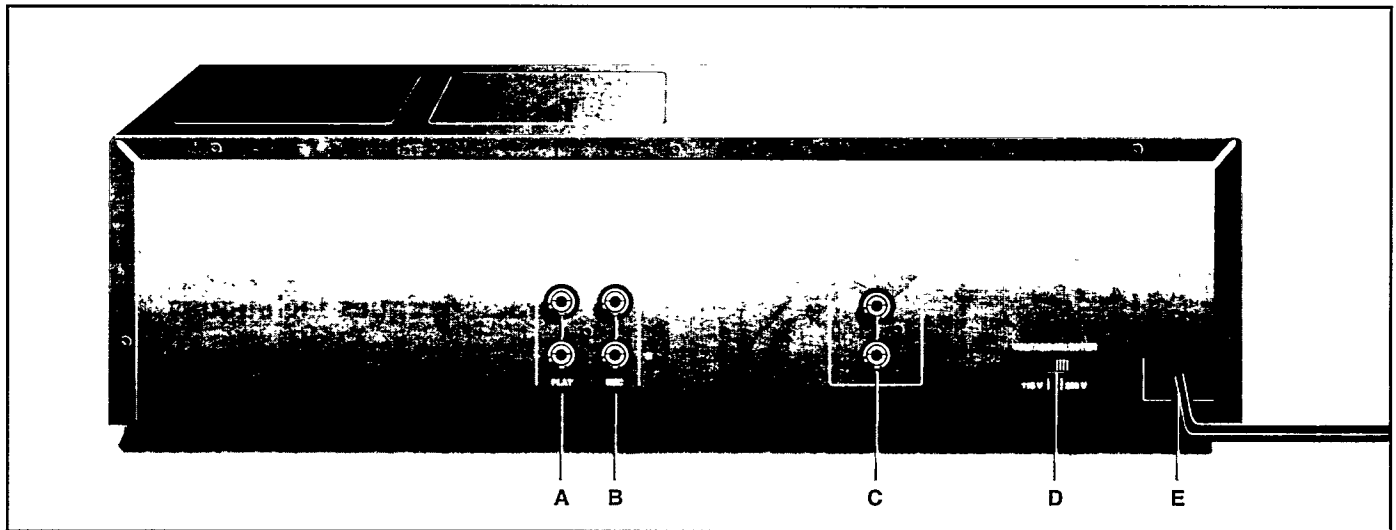
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Suomi

English



**Thank you for selecting the Philips FC931 Stereo Cassette Deck.**

A cassette deck of the state-of-the-art Philips 900 series, the FC931 combines supreme recording and playback quality with a high degree of user-friendliness.

Record and playback quality are founded on solenoid electronic tape transports, supported by features such as:

- Double autoreverse tape transports
- Dolby B/C noise reduction;
- Dolby HX Pro headroom extension system;
- CD synchro dubbing facility;
- Electronic counter;
- ESI-BUS sockets for full integration into ESI remote-controlled Philips HiFi systems (900 series).
- Automatic recording bias adaptation

Please read this manual carefully **before** you attempt to connect or operate the cassette deck.

This manual is divided into five sections:

- **Installation:** explains how to connect your cassette deck.
- **Operation:** explains how to use the major controls.
- **Advanced Options:** gives more detailed information on operation, including special features.
- **System Aspects:** explains the Enhanced System Intelligence feature and its benefits.
- **General Information:** includes maintenance information.

**MAINS SUPPLY**

- Check that the mains voltage as shown on the type plate corresponds to your local mains supply. If it does not, consult your dealer or service organisation.
- If your unit has a voltage selector, make sure **only** to change the voltage in the POWER OFF position.
- Insert the plug of the mains lead into the wall socket.
- If your amplifier has AC MAINS OUTLETS, you should insert the plug of the mains lead into these outlets. The mains supply is now connected.
- To disconnect the set from the mains completely, remove the mains plug from the wall socket or from the AC MAINS OUTLETS of your amplifier.

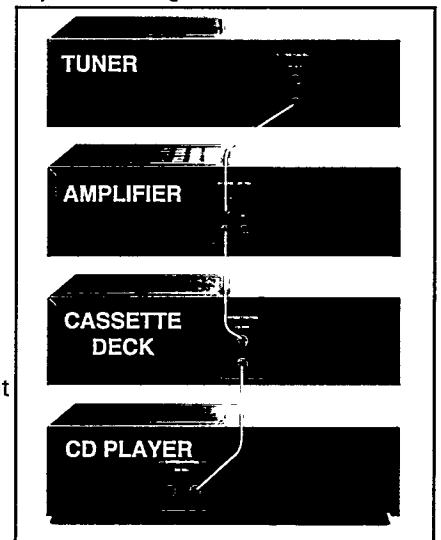
**WARNING**

**Do not connect the set to the mains until all other connections have been made and the mains voltage (indicated on the type plate) has been checked.**

**CONNECTIONS**

- A PLAY** – output sockets for connection to the TAPE input sockets of your amplifier.
- B REC** – input sockets for connection to the TAPE output sockets of your amplifier.
- C ESI BUS** (Enhanced System Intelligence)  
Remote control sockets for connecting up the equipment when you are incorporating the cassette deck in a HiFi system with ESI BUS connection (e.g. Philips 900 series)

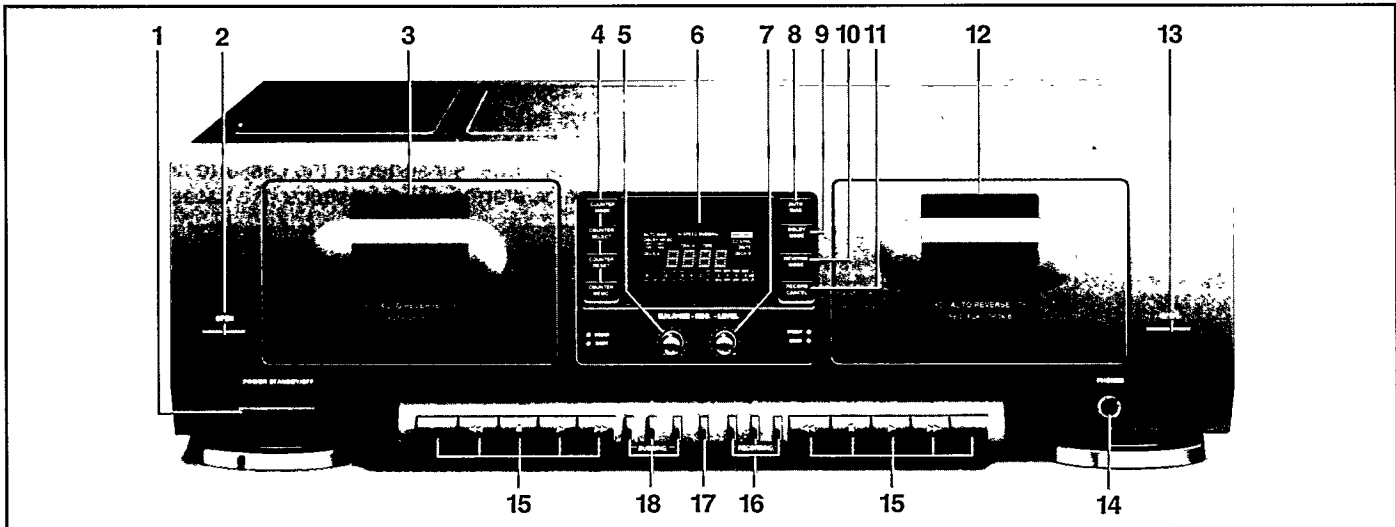
Connect the ESI socket to the socket of the external equipment that uses the ESI remote-control system.












- D Voltage selector 115 V/230 V** – for selecting the mains voltage (not on all versions)
- E MAINS** – mains lead

*The type plate is located on the back of the set. This product complies with the radio interference requirements of the European Community.*

After having made the necessary connections, your cassette deck is ready for use. In the next chapter we will describe how to operate it.







- 1 **POWER STANDBY/OFF** – for switching the cassette deck on and off
- 2 **OPEN** – for opening cassette holder 3 of deck A
- 3 **Cassette holder A** – for playback in both directions
- 4 **COUNTER**
  - **COUNTER MODE** – for selecting display to show the tape counter, the total playing time or the track playing time
  - **COUNTER SELECT** – for selecting the tape counter to count for deck A or deck B
  - **COUNTER RESET** – for returning the tape counter in the display to 0000
  - **COUNTER MEMO** – for storing the actual counter reading in the memory
- 5 **REC BALANCE** – for adjusting the recording balance
- 6 **Display**
- 7 **REC LEVEL** – for adjusting the recording volume
- 8 **AUTO BIAS** – for starting the automatic procedure which adjustst correct recording bias for the tape in deck B.
- 9 **DOLBY MODE** – for switching the Dolby Noise Reduction system on and off and selecting Dolby B or Dolby C Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. Hx Pro originated by Bang and Olufsen. DOLBY, the double-D symbol  and HX Pro are trademarks of Dolby Laboratories Licensing Corporation.
- 10 **REVERSE MODE:**
  -  – the tape stops at the end of each side.
  -  – playback (+ recording for deck B) of both cassette sides, after which the tape stops at the end of the second side.
  -  – continuous playback of both cassette sides
  -  – for continuous playback of both cassette sides on both decks
- 11 **RECORD CANCEL** – for cancelling the current recording. The set will go back to the beginning of the current recording and enter the record pause mode.
- 12 **Cassette holder B** – for recording and playback in both directions
- 13 **OPEN** – for opening cassette holder 12 of deck B
- 14 **PHONES** – socket for stereo headphones  
You can connect a pair of stereo headphones with 6.3 mm plug to this socket.
- 15 **Keyboard for deck A and deck B**
  -  – for fast winding in the opposite direction to that in which the tape is travelling or for searching for previous tracks when pressing this key briefly during playback
  - **STOP**  – for stopping the tape transport
  - **PLAY**  – for starting playback

-  – for fast winding in the tape travel direction or for searching for next tracks when pressing this key briefly during playback
- **CHANGE SIDE** – for reversing the tape travel direction of the playing deck (A or B) or reversing the tape travel direction of both decks when they are in STOP mode. After switching on the power, the unit always automatically displays the last directions chosen.
- 16 **RECORDING**
  - **RECORD** – for starting recording.
  - **MUTE** – for recording a pause (silent passage)
  - **PAUSE** – for preparing or interrupting a recording
- 17 **APPEND** – for searching for a blank space on the tape in deck B of at least 20 seconds suitable for recording
- 18 **DUBBING**
  - **NORMAL** – for dubbing from deck A to B at normal speed
  - **FAST** – for dubbing from deck A to B at high speed
  - **CD SYNC.** – for synchro start of deck B and a CD player when recording from a Compact Disc (provided the CD player is connected via its ESI bus to your Philips system 900 series).

**DISPLAY**



- The display shows:
-   – when the reverse-mode continuous playback of both cassette sides on both decks is activated;
  -   – tape transport counter or time of deck A and deck B;
  - **DOLBY B/C** – when Dolby Noise Reduction System B or C is switched on;
  - **AUTO BIAS** – during the automatic bias adjustment procedure
  - **MUTE** – during recording mute;
  - **RECORD** – during any recording or dubbing; Starts flashing during recording pause mode;
  - **CD SYNC.** – during a synchronized CD recording;
  - **DUBBING** – during dubbing at normal speed;
  - **HI SPEED DUBBING** – during high-speed dubbing;
  - **DECK A/B** – indicating that the tape transport counter is counting for deck A or deck B; blinks when COUNTER MEMO is activated.
  - **Peak level meters** – indicating the output or recording level which can be adjusted with the REC BALANCE and REC LEVEL controls.

**POWER STANDBY/OFF**

- Press the POWER STANDBY/OFF key **1** to switch on the power. Press this key again to switch the power off.
- If you have connected the plug of the mains lead to the MAINS OUTLETS of your amplifier, the power will automatically be switched off as soon as you switch off the amplifier.

**AUTOMATIC TAPE SELECTION AND DETECTION**

When a cassette is inserted in the cassette holder, the deck will always automatically select the tape type: Fe, Cr or IVIe (IEC I, IEC II, IEC IV) as soon as the cassette holder is closed. When no cassette is inserted in the cassette holder, no tape action can be started. (The presence of a cassette is detected).

**PLAYBACK**

**Playback of one side (deck A or B)**

- Open the cassette holder of the selected deck by pressing the corresponding OPEN button.
- Insert a recorded cassette with the open side facing downwards.
- Close the cassette holder.
- Select  $\square$  with the reverse-mode selector **10**.
- If desired, switch on the Dolby NR system **9**.
- Select the playback direction with the CHANGE SIDE key. The tape travel direction will be indicated by the red FRONT and BACK indicators.
- Now press the PLAY  $\blacktriangleright$  key on deck A or B.  
The green indicator above the PLAY  $\blacktriangleright$  key lights up.  
The deck plays one cassette side and the tape stops automatically at the end.
- You can stop playback by pressing STOP  $\blacksquare$  on deck A or B.
- In order to continue playback press PLAY  $\blacktriangleright$  again.

**Playback of both sides (deck A or B)**

- If you want to play both sides of the cassette, proceed as described under 'Playback of one side' but select  $\square$  with the reverse-mode selector **10**.  
The deck plays both cassette sides and the tape stops automatically at the end of the second side.

**CONTINUOUS PLAYBACK**

**Continuous playback with two cassettes (deck A and B)**

- Insert a recorded cassette into both cassette holders as indicated above.
- Close the cassette holders.
- Select  $\square$  with the reverse-mode selector **10**.
- If desired, switch on the Dolby NR system **9**.
- Select the playback direction of deck A with the respective CHANGE SIDE key.
- Press PLAY  $\blacktriangleright$  on deck A.
- Deck A plays both cassette sides and then deck B plays both cassette sides.
- Deck A starts again and both decks keep playing both cassette sides continuously (to a maximum of three times for each cassette).
- Press STOP  $\blacksquare$  on the playing deck to stop continuous playback.

**Note**

If you wish to **start** with deck B, first select the playback direction of deck B with the respective CHANGE SIDE key and then press the PLAY  $\blacktriangleright$  key of deck B.

**Continuous playback with one cassette (deck A or B)**

- Insert a recorded cassette into one cassette holder as indicated above.
- Close the cassette holder.
- Select  $\square$  with the reverse-mode selector **10**.  
If desired, switch on the Dolby NR system **9**.
- Select the playback direction with the CHANGE SIDE key (of deck A or B)
- Press PLAY  $\blacktriangleright$  (on deck A or B).
- The selected deck keeps playing both cassette sides (up to a maximum of six times) until you press STOP  $\blacksquare$  on the playing deck.

**FAST WINDING/REWINDING OF A TAPE**

- Use the FORWARD  $\blacktriangleright\blacktriangleright$  keys for fast winding in the tape travel direction.
- Use the BACKWARD  $\blacktriangleleft\blacktriangleleft$  keys for fast winding in the opposite direction to that in which the tape is travelling. A flashing (4x per second) green indicator above the PLAY keys indicates the winding action.
- When you keep these keys pressed **during playback** the winding will continue as long as you keep the key pressed. Playback will be continued when the key is released.

**DIRECT ACCESS TO A DESIRED TRACK**

The  $\blacktriangleleft\blacktriangleleft$  and  $\blacktriangleright\blacktriangleright$  keys also enable you to select directly a desired track on a cassette by skipping one or more tracks. This can be done by briefly pressing the keys **during playback**. Up to 15 tracks can be skipped in each direction. This system reacts to silent passages of at least 4 seconds between the tracks.

- Press  $\blacktriangleleft\blacktriangleleft$  or  $\blacktriangleright\blacktriangleright$  several times until the desired track number appears in the display.
- The tape will wind to the beginning of the selected track and playback will start automatically.
- Each time a new track is detected during the winding of the tape the display will show (for 2 seconds) the amount of tracks that are still to be skipped

**Note:** In some cases a very faint passage in a piece of music can be picked up by the system as a 'silent' passage

## RECORDING (deck B)

### Recording on both sides of a cassette

- Open the cassette holder **12** by pressing OPEN **13**.
- Insert a cassette which is not protected against recording, with the open side facing downwards.
- Close the cassette holder.
- If desired, switch on the Dolby NR system **9**.
- Select on your amplifier the sound source from which you wish to record.
- Press PAUSE **16** to set the deck in the record-pause mode.
- Select  $\curvearrowright$  with the reverse mode selector **10**.
- Allow the unit you wish to record from to play and meanwhile adjust the recording level with the REC LEVEL control **7** so that the recording level indicators in the display light up during passages with an average volume up to 0 dB. An excess of up to +2 is normal during peaks.
- Differences between the left and the right channel can be corrected with the REC BALANCE control **5**.
- Select the tape travel direction with the CHANGE SIDE key.  
The direction will be indicated by the red FRONT and BACK indicators.
- Press the RECORD key to start the recording. The display shows **RECORD**.
- Check the recording level at intervals and adjust it gradually if required.
- You can interrupt the recording temporarily by pressing the PAUSE key. Press RECORD to continue recording.
- The deck stops automatically when both sides of the cassette are full.
- Press the STOP  $\blacksquare$  key to stop recording at an earlier point.

### Recording on one side of a cassette

- If you only want to record on one side of the cassette, select  $\curvearrowleft$  with the reverse mode selector **10**.

#### Copyright

Recording or copying is only authorised if there is no violation of copyright or other rights of third parties.

#### Note for users in the U.K.

Recording and playback of material may require consent. See Copyright Act 1956 and The Performers' Protection Acts 1958 to 1972.

## DOLBY HX PRO HEADROOM EXTENSION SYSTEM

The built-in HX Pro headroom extension system improves the recording performance of your cassette deck. It prevents large high-frequency signals from overloading the tape by introducing automatic bias compensation. HX Pro is not a noise reduction system because it functions only during recording and no decoding is required. Therefore, a tape recorded with the HX Pro system can be played back on any other cassette deck while retaining the benefits of HX Pro.

## DUBBING (FROM DECK A TO B)

- Open the cassette holders **3** (deck A) and **12** (deck B) by pressing the OPEN buttons **2** and **13**.
- Insert the *recorded* cassette into the cassette holder of deck A with the open side facing down; then close the cassette holder.
- Insert a cassette which is *not* protected against recording into the cassette holder of deck B with the open side facing down and close the cassette holder.
- Select the tape direction for deck A and B with the respective CHANGE SIDE key **15**.
- Select the required reverse mode ( $\curvearrowleft$  or  $\curvearrowright$ ) with the reverse-mode selector **10** to make a single or double-sided dubbing.
- Start the dubbing process by pressing one of the DUBBING keys **18**:
  - NORMAL, for dubbing at normal speed, the display shows **DUBBING**.
  - FAST, for dubbing at double speed, the display shows **HIGH SPEED DUBBING**.
  - An original cassette recorded with Dolby Noise Reduction will always produce a copy with Dolby NR.
- Press STOP  $\blacksquare$  to stop dubbing at any desired point.
- Both decks then stop simultaneously.

**Note:** During dubbing (from deck A to B at normal or double speed) it is not possible to adjust the recording and balance level.

While dubbing you can listen to any other source.

**RECORD MUTE (deck B)**

- To find a passage easily with ◀◀ or ▶▶ you can obtain a 4-second silent recording by pressing RECORD MUTE **16** once during recording.
- If you keep RECORD MUTE pressed, the silent recording will last as long as you keep the key pressed down. Undesired passages (announcements etc.) can thus be omitted during recording. During record mute the **MUTE** flag on the display lights up.

**Note:** Record mute only works during recording and not during dubbing (NORMAL, FAST or CD SYNC.).

**RECORD CANCEL (deck B)**

If you interrupt a recording by pressing the RECORD CANCEL key **11**, the deck will stop recording and rewind until a silent passage is found of approx. 4 seconds. The deck then enters the RECORDING PAUSE mode

**BLANK SEARCH (deck B)**

- To find a blank passage of at least 20 seconds suitable for recording press the APPEND key **17**.
- The tape in deck B will be wound until a blank passage (of at least 20 seconds) is found. The tape will then automatically be returned to the beginning of the blank passage after which the deck enters the RECORDING PAUSE mode.

**TAPE TRAVEL COUNTER**

The digital counter is used for deck A and deck B.

**COUNTER MODE**

- The COUNTER MODE key **4** enables you to select 3 different modes:
  - Tape counter  
The display shows e.g. 2345
  - Total playing time  
The display shows e.g. 23:45 (+ TIME indication)
  - Playing time of the current track  
The display shows e.g. 02:45 (+ TRACK indication)

**COUNTER RESET**

- The counter can be reset to 0000 or 00:00 by pressing the COUNTER RESET key . Only the currently selected counter mode will be reset.
- The status of the other counter modes and the counter of the other deck will be kept in the memory.
- All 3 counter modes will be reset at the same time:
  - when the cassette holder is closed;
  - every time the play direction is reversed (automatically or manually).

**COUNTER SELECT**

- You can display the counter of deck A or of deck B with the COUNTER SELECT key
- The indication **DECK A** or **DECK B** will light up on the display.

**COUNTER MEMO (only when the tape counter is selected)**

- By pressing the COUNTER MEMO key the counter reading at that moment will be stored in the memory and MEMO will light up on the display.
- When BACKWARD ◀◀ is pressed, the tape will rewind and stop at the memorized counter setting.

**CD SYNCHRO DUBBING**

If the ESI BUS sockets of a CD player are connected (directly or via your HiFi system) to the ESI BUS sockets of your cassette deck, you can synchronise the start of a recording with the start of a CD or CD programme as follows:

- Insert a cassette in deck B and prepare your CD player for playback.
- If desired, switch on the Dolby NR system **9**.
- Press the CD SYNC key **18**.
  - The CD will start playing.
- The **CD SYNC** and **RECORD** indications on the display of your deck will start flashing
- You can now adjust the recording level with the REC LEVEL control **7** so that the recording level indicators in the display light up during passages with an average volume up to 0 dB. An excess of up to +2 is normal during peaks.
- Differences between the left and the right channel can be corrected with the REC BALANCE control **5**.
- After adjusting the recording level select the tape travel direction with the CHANGE SIDE key on deck B and press RECORD **14** to start the recording. The **CD SYNC** and **RECORD** indications will light up on the display
  - The CD player returns to the beginning of the disc (or programme) and enters the pause mode.
  - Recording starts and after a 7-second delay the CD will start playing. This delay is to ensure that the recording does not start until after the leader tape.
  - 4-second pauses will be inserted between the CD track.s.
  - CD synchro dubbing will stop when one or both sides of the cassette are full or when the CD reaches the end.
- You may also press the STOP key on the CD player or deck to stop dubbing at an earlier stage.

**Note:** When the standby mode is selected during CD synchro dubbing, the dubbing will be cancelled

**CD dubbing without a given tape length**

If you have selected ◁ and the end of the tape is reached in the middle of a track, the CD player repeats that particular track from the beginning on the second side.

**CD dubbing with a given tape length**

If you have chosen the tape length with EDIT on the CD-player, the display shows which tracks fit on one side of the cassette. A blank part will be recorded after the last track and the following tracks will be recorded on the second side of the cassette (provided ▷ was selected).

**AUTO BIAS**

Your cassette deck has been preset in the factory for optimal recording on the 3 standard tape types: IEC I, II and IV. Unfortunately, the sensitivity of the tapes available on the market differs somewhat from manufacturer to manufacturer. For that reason this cassette deck provides a special function which enables it to adapt automatically the recording BIAS to the tape you are using. This results in an optimized overall frequency response to your tape.

- Insert a cassette which is not protected against recording in Deck B.
- Keep the AUTO BIAS key **8** pressed for more than 2 seconds. The cassette deck will automatically start the adjustment process. When the process is finished it will return to the original tape position.
- It is possible that the cassette deck may not find the optimum BIAS for some tapes. In that case the **AUTO BIAS** indication on the display will blink, and the deck will adjust the BIAS as good as possible.
- The BIAS level will be reset to the factory settings every time the deck is switched on or off.



## ENHANCED SYSTEM INTELLIGENCE

If the cassette deck is connected via the ESI BUS sockets to the ESI BUS sockets of a HiFi system (e.g. the PHILIPS 900 series) and when the AUTO SELECT function on your amplifier is activated, there will be an additional internal communication between the different elements in your system.

The whole system can be operated by the system remote control through the sensor of the amplifier.

In addition, the functions AUTOMATIC SOURCE SELECTION and AUTOMATIC STOP as mentioned below are then accessible.

## AUTOMATIC SOURCE SELECTION

If the AUTO SELECT function on the amplifier is activated, the cassette deck will automatically be selected as soon as you press the CD SYNC. or PLAY ► keys on your deck

## AUTOMATIC STOP

If the AUTO SELECT function on the amplifier is activated, the cassette deck will automatically stop playing as soon as another source is selected.

**e.g.** When you select TUNER with the source selection knob on your amplifier while listening to your cassette deck, the deck will be stopped.

## STANDBY

- Switching your cassette deck to standby can only be done via the system remote control.
- First select TAPE on the remote control and then briefly press the STANDBY key.
- The cassette deck will be switched to standby.
- If the standby key is kept pressed for more than 1 second the whole system will be switched to standby. All light indicators will be switched off with the exception of the standby LED on the amplifier.
- If AUTO SELECT is activated, the indicator of this key will also light up during standby.
- Note:** If the whole system is switched to standby when a recording is active, the recording (or dubbing) will be cancelled.
- By selecting the TAPE source on the amplifier or on the system remote control the cassette deck will be activated again.
- The cassette deck will also be activated again as soon as you press the DUBBING (NORMAL, FAST, CD SYNC.), STOP ■, PLAY ►, FORWARD ►►, BACKWARD ◄◄, or PAUSE keys

## SYSTEM TIMER

By connecting the cassette deck to a timer, you can start and stop playback or recording automatically.

- If the tuner in your Philips HiFi 900 system is equipped with a timer (e.g. FT930), make sure that the ESI BUS connections are made.
- Set the timer and switch on the cassette deck.
- Prepare the cassette deck for playback or recording (see PLAYBACK or RECORDING chapter)
- Stop both decks.
- At the time set on the timer, deck B will start playback or recording, provided there is a tape in deck B.
- If there is no tape in deck B, deck A is automatically selected and will start playback at the time set on the timer.

## REMOTE CONTROL

The following cassette deck functions can be operated via your system remote control (Philips 900 series), provided the correct ESI BUS connections are made:

- **TAPE** - source selection
- **DECK A/B** - for selecting deck A or B
- **►►** - for winding the tape in the playing direction
- **◄◄** - for winding the tape in the opposite direction
- **PLAY** - for starting playback
- **RECORD** - for starting recording immediately
- **STOP** - for stopping recording/playback
- **PAUSE** - for interrupting recording/playback
- **MODE** - for selecting the playing direction for both decks
- **STANDBY** - for selecting standby mode

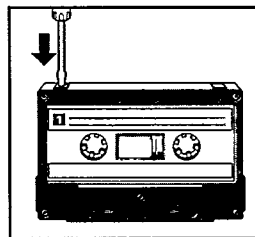
- When using your system remote control, first press TAPE to select the tape mode.
- Then select DECK A or DECK B and subsequently press the key of the desired tape function.

## MAINTENANCE

- Do not leave the unit or cassettes for any length of time in direct sunlight or other places where high temperatures can occur, such as in the vicinity of heating apparatus.
- Do not expose the equipment to humidity or rain.
- A chamois leather slightly moistened with water is sufficient for cleaning the cabinet.
- Do not use cleaning agents containing alcohol, spirits, ammonia or abrasives.

## Compact Cassettes

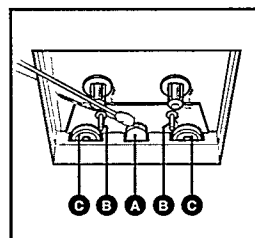
- The tape in the cassette is attached at both ends with leader tape. Nothing will be recorded for 6 to 7 seconds at the beginning (and at the end) of the tape.



Accidental erasure of a recording can be prevented by breaking the small tab in the top left-hand corner on the back of the cassette. You can then no longer record on this side. This protection can be removed by covering the hole with a small piece of adhesive tape.

- Store your cassettes after use in the box provided. Keep the cassettes at room temperature and avoid leaving them in the sun or too close to magnets and transformers of e.g. recorders, radios, TVs and loudspeakers.

## Recorder maintenance



- After approximately 15 hours of use the heads (A), the capstans (B) and the pressure rollers (C) must be cleaned.
- You can clean them with a cotton bud dipped in alcohol. Make sure that the unit is not connected to the mains.
- *The drive mechanism must NOT be lubricated!*

**TAPE TRANSPORT:** Twin solenoid electronic autoreverse

Cassette system:.....Analog Compact Cassette  
 Motor type:.....DC/DC servo 2x  
 Tape travel speed: .....4.76 cm/sec.  
 Speed tolerance (max. speed variation): .....< 2%  
 Wow and flutter:.....0.1% JIS WRMS

**HEADS:** Super-hard Metal Alloy recording playback heads and dual-gap ferrite erase head

Frequency response according to:	IEC	NAB
for metal tape (type IV):	40-16,000 Hz	40-17,000 Hz
for CrO <sub>2</sub> tape (type II):	40-16,000 Hz	40-17,000 Hz
for normal tape (type I):	40-15,000 Hz	40-16,000 Hz
S/N ratio (without Dolby NR) acc. to:	IEC/DIN	NAB
for metal tape (type IV):	58 dB	59 dB
for CrO <sub>2</sub> tape (type II):	58 dB	59 dB
for normal tape (type I):	57 dB	58 dB
Improvement of S/N ratio		
with Dolby B NR at 5 kHz:.....		10 dB
with Dolby C NR at 1 kHz:.....		18 dB
Channel separation at 1 kHz:.....		35 dB
FM pilot suppression:.....		30 dB
Distortion at max. level (CrO <sub>2</sub> ):.....		< 1.8%

**CONNECTION SOCKETS**

Line in, Cinch-type: .....75 mV at 47 kOhm  
 Line out, Cinch-type:.....450 mV (Zo=2.5 kOhm)  
 Headphone:.....Impédance 8 - 600 Ohm  
 Remote control:.....ESI BUS, 2 x cinch

**POWER SUPPLY**

Mains voltages:.....according to type plate  
 Mains frequencies:.....50 and 60 Hz without conversion  
 Power consumption: .....15 W  
 Electrical requirements:.....IEC 65

**CABINET, GENERAL**

Material, finish: .....metal and polystyrene  
 Dimensions (w x h x d):.....435 x 140 x 300 mm approx.  
 Weight:.....6 kg  
 Accessories: .....2 pairs Cinch Cable

*These specifications are subject to modification without notice*

**RECYCLING**

Please observe the local regulations regarding the disposal of packing materials, exhausted batteries and old equipment.

- All redundant packaging material has been omitted. We have done our utmost to make the packaging easy separable into three mono-materials:
  - cardboard (box)
  - expandable polystyrene (buffer)
  - polyethylene (bags, protective foam sheet)
- Your set consists of materials which can be recycled if disassembled by a specialized company.
- Note:** Switching off the standby mode overnight will save energy.

**TRANSPORT DE BANDE:** Double autoreverse électromagnétique

Type de cassette : .....Cassette compacte  
 Type de moteur : .....DC/DC servo 2x  
 Vitesse de défilement de la bande : .....4,76 cm/s.  
 Tolérance de la vitesse (variation max. de la vitesse) : .....<2%  
 Pleurage et scintillement : .....0,1% JIS WRMS

**TETES:** Têtes pour enregistrement et lecture en alliage métallique extra dur et tête d'effacement ferrite à double écartement

Réponse en fréquences conformément aux normes :

	CEI	NAB
bande métal (type IV):	40-16.000 Hz	40-17.000 Hz
bande chrome (type II):	40-16.000 Hz	40-17.000 Hz
bande normale (type I):	40-15.000 Hz	40-16.000 Hz
Rapport signal/bruit (sans Dolby NR) conformément aux normes:	IEC/DIN	NAB
bande métal (type IV):	58 dB	59 dB
bande chrome (type II):	58 dB	59 dB
bande normale (type I):	57 dB	58 dB
Amélioration du rapport signal/bruit :		
avec Dolby B NR à 5 kHz:.....		10 dB
avec Dolby C NR à 1 kHz:.....		18 dB
Séparation des voies à 1 kHz:.....		35 dB
Suppression pilote FM:.....		30 dB
Distorsion à niveau max. (CrO <sub>2</sub> ):.....		< 1,8%

**BRANCHEMENT PRISES** (avec indice de sensibilité)

Entrée ligne, type CINCH: .....75 mV à 47 kOhm  
 Sortie ligne, type CINCH:.....450 mV (Zo=2,5 kOhm)  
 Casque: .....Impédance 8 - 600 Ohm  
 Télécommande: .....ESI BUS 2x Cinch

**ALIMENTATION**

Tensions secteur : .....reportez -vous à la plaquette signalétique  
 Fréquences secteur: .....50 et 60 Hz sans conversion  
 Consommation: .....15 W  
 Conditions électriques requises: .....CEI 65

**BOITIER, GENERALITES**

Finition matériel:.....métal et polystyrene  
 Dimensions (w x h x d):.....435 x 140 x 300 mm approx.  
 Poids:.....6 kg approx.  
 Accessoires: .....2x2 Cinch câbles

*caractéristiques techniques sauf modifications éventuelles*

**RÉCYCLAGE**

Veuillez observer les règlements locaux lorsque vous vous débarrassez des matériaux d'emballage, des piles usées et de votre ancien appareil.

- Tous les matériaux d'emballage superflus ont été supprimés. Nous avons fait notre possible afin que l'emballage soit facilement séparable en trois types de matériau:
  - carton (boîte)
  - polystyrène expansible (matériel tampon)
  - polyéthylène (sachets, panneau en matière plastique cellulaire de protection)
- Votre appareil est composé de matériaux pouvant être recyclés s'il est démonté par une firme spécialisée.
- Remarque:** Le fait de mettre le mode de veille hors tension pendant la nuit est un bon moyen d'économiser l'énergie.

## D TECHNISCHE DATEN

### ANTRIEBSSYSTEM zweifache Solenoidelektronik autoreverse

Kassettensystem: .....Kompakt-Kassette  
Motortyp: .....DC/DC servo 2x  
Bandlaufgeschwindigkeit: .....4,76 cm/sek.  
Geschwindigkeitstoleranz (max. Abw. v. Sollgeschw.): ...< 2%  
Gleichlaufschwankungen .....0,1% JIS WRMS

### TONKÖPFE: Super-hard Metal Alloy Aufnahme- und Wieder-gabeköpfe und Ferrit-Löschkopf mit doppeltem Luftspalt

Frequenzgang nach:	IEC	NAB
für Metal-Kassetten (Typ IV):	40-16.000 Hz	40-17.000 Hz
für CrO <sub>2</sub> -Kassetten (Typ II):	40-16.000 Hz	40-17.000 Hz
für normale Kassetten (Typ I):	40-15.000 Hz	40-16.000 Hz

Störabstände  
(ohne Dolby) nach:

	IEC/DIN	NAB
für Metal-Kassetten (Typ IV):	58 dB	59 dB
für CrO <sub>2</sub> -Kassetten (Typ II):	58 dB	59 dB
für normale Kassetten (Typ I):	57 dB	58 dB

Verbesserung der Störabstände  
mit Dolby B bei 5 kHz: .....10 dB  
mit Dolby C bei 1 kHz: .....18 dB  
Kanaltrennung bei 1000 Hz: .....35 dB  
UKW-Pilottonunterdrückung: .....30 dB  
Verzerrungen bei max. Pegel (CrO<sub>2</sub>): .....< 1,8%

### ANSCHLUßBUCHSEN (mit Empfindlichkeitswerten)

Line in, Cinchbuchse: .....75 mV bei 47 kOhm  
Line out, Cinchbuchse: .....450 mV (Z<sub>0</sub>=2,5 kOhm)  
Kopfhörer .....Impedanz 8 - 600 Ohm  
Fernbedienung: .....ESI BUS 2 x Cinchkabel

### NETZTEIL

Netzspannung: .....Laut Typenschild  
Netzfrequenz: .....50 und 60 Hz ohne Umwandlung  
Leistungsaufnahme: .....15 W  
Elektrische Anforderungen: .....IEC 65

### GEHÄUSE, ALLGEMEIN

Material, Ausführung: .....metal und polystyrene  
Abmessungen (B x H x T): .....435 x 140 x 300 mm approx.  
Gewicht: .....6 kg approx.  
Zubehör: .....2 x Cinchkabelpaare

Änderungen vorbehalten

### RECYCLING

Bitte informieren Sie sich darüber, wie Sie Verpackungsmaterialien, leere Batterien und alte Geräte entsprechend der örtlichen Bestimmungen entsorgen können.

1. Überflüssiges Verpackungsmaterial wurde vermieden. Wir haben unser möglichstes getan, damit die Verpackung leicht in drei Monomaterialien aufteilbar ist:
  - Wellpappe (Schachtel)
  - expandierbares Polystyrol - Styropor® (Puffer)
  - Polyäthylen (Taschen, Schaumstoffolien)
2. Ihr Gerät besteht aus Materialien, die von darauf spezialisierten Betrieben wiederverwertet werden können.
3. **Anmerkung:** Durch das Abschalten der Betriebsbereitschaft (Standby) in der Nacht sparen Sie Energie.

## NL TECHNISCHE GEGEVENS

### BANDTRANSPORT: Solenoïde elektronisch autoreverse

Cassettesysteem: .....Compact cassette  
Motortype: .....DC/DC-servo  
Bandsnelheid: .....4,76 cm/sec.  
Snelheidstolerantie (max. snelheidsafwijking): .....<2%  
Jengel: .....0,1% JIS WRMS

### KOPPEN: Super long-life opname/weergave-koppen en dubbelspletige ferriet wiskop

Frequentiebereik volgens:	IEC	NAB
bij metal-cassettes (type IV):	40-16.000 Hz	40-17.000 Hz
bij CrO <sub>2</sub> -cassettes (type II):	40-16.000 Hz	40-17.000 Hz
bij ferro-cassettes (type I):	40-15.000 Hz	40-16.000 Hz

Signaal/ruisverhouding  
(zonder Dolby NR) volgens:

	IEC/DIN	NAB
bij metal-cassettes (type IV):	58 dB	59 dB
bij CrO <sub>2</sub> -cassettes (type II):	58 dB	59 dB
bij ferro-cassettes (type I):	57 dB	58 dB

Verbetering van de signaal/ruisverhouding  
met Dolby B NR bij 5 kHz: .....10 dB  
met Dolby C NR bij 1 kHz: .....18 dB  
Kanaalscheiding bij 1 kHz: .....35 dB  
FM onderdrukking: .....30 dB  
Vervorming bij max. niveau (CrO<sub>2</sub>): .....<1,8%

### AANSLUITINGEN (met gevoeligheidswaarden)

Lijn in, type Cinch: .....75 mV bij 47 kOhm  
Lijn uit, type Cinch: .....450mV (Z<sub>0</sub>=2,5 kOhm)  
Hoofdtelefoon: .....impedantie 8-600 Ohm  
Afstandsbediening: .....ESI BUS, 2x Cinch

### NETVOEDING

Netspanning: .....Zie typeplaatje  
Frequenties: .....50 en 60 Hz zonder conversie  
Opgenomen vermogen: .....15 W  
Elektrische veiligheidsvoorschriften: .....IEC 65

### BEHUIZING, ALGEMEEN

Materiaal en afwerking: .....metaal en polystyrene  
Afmetingen: .....ca. 435 x 140 x 300 mm  
Gewicht: .....ca. 6 kg  
Accessoires: .....2 paar Cinchkabels

Wijzigingen voorbehouden

### RECYCLING

Informeer waar u verpakkingsmateriaal, lege batterijen en oude apparatuur voor recycling kunt inleveren.

1. Wij hebben de hoeveelheid verpakkingsmateriaal zoveel mogelijk beperkt en ervoor gezorgd dat de verpakking gemakkelijk in drie materialen te scheiden is.
  - karton (doos)
  - polystyreen-schuim (buffer)
  - polyethyleen (zakken, plastic folie)
2. Het apparaat bestaat uit materialen die door een gespecialiseerd bedrijf gerecycled kunnen worden.
3. **Opmerking:** U spaart energie als u 's nachts de stand-by stand uitschakelt.

**TRANSPORTE DE LA CINTA:** Doble, electrónico de solenoide, con inversión automática

Sistema de casete:.....Casete compacta  
 Tipo de motor:.....CC/CC servo 2x  
 Velocidad de la cinta:.....4,76 cm/seg.  
 Tolerancia de velocidad (máx. variación de velocidad): ..... < 2%  
 Fluctuación y trémolo:.....0,1% JIS WRMS

**CABEZAS:** cabezas de reproducción y grabación de aleación metálica superdura; cabeza de borrado de ferrita, de doble separación

Respuesta de frecuencia según:	IEC	NAB
para cinta de metal (tipo IV):	40-16.000 Hz	40-17.000 Hz
para cinta de CrO2 (tipo II):	40-16.000 Hz	40-17.000 Hz
para cinta normal (tipo I):	40-15.000 Hz	40-16.000 Hz
Relación S/N (sin Dolby NR) según:	IEC/DIN	NAB
para cinta de metal (tipo IV):	58 dB	59 dB
para cinta de CrO2 (tipo II):	58 dB	59 dB
para cinta normal (tipo I):	57 dB	58 dB
Mejora de la relación S/N		
con Dolby B NR a 5 kHz:		10 dB
con Dolby C NR a 1 kHz:		18 dB
Separación de canales a 1000 Hz:		35 dB
Supresión de piloto de FM:		30 dB
Distorsión a nivel máximo:		< 1,8%

**BORNES DE CONEXION**

Entrada, tipo Cinch:.....75 mV a 47 kOhm  
 Salida, tipo Cinch:.....450 mV (Zo=2,5 kOhm)  
 Auricular:.....Impedancia 8 - 600 Ohm  
 Mando a distancia:.....ESI BUS 2x Cinch

**ALIMENTACION**

Tensión de la red : .....según la placa de tipo  
 Frecuencias de la red:.....50 y 60 Hz sin conversión  
 Consumo de potencia:.....15 W  
 Requerimientos eléctricos:.....IEC 65

**CARCASA EN GENERAL**

Material, acabado:.....metal + polystyrene  
 Dimensiones (an x al x pr):.....435 x 140 x 300 mm aprox.  
 Peso:.....6 kg aprox.  
 Accesorios:.....2x cable de conexión Cinch

*Sujetas a modificación*

**RICICLAJE**

Observe las disposiciones locales referentes a la forma de entregar los materiales de embalaje, las pilas usadas y su antiguo equipo para el reciclaje.

1. Se ha suprimido todo el material de embalaje innecesario. Hemos hecho todo lo posible por que el embalaje pueda separarse fácilmente en tres materiales independientes:
  - cartón (caja)
  - poliestireno expandible (amortiguación)
  - polietileno (bolsas, plancha de espuma protectora)
2. Los materiales que componen el equipo son reciclables y reutilizables si son desmontados por una empresa especializada.
3. **Observación:** La desconexión del modo de espera durante la noche supondrá un ahorro de energía.

**TRASPORTO DEL NASTRO:**

Twin solenoidale elettronicamente autoreverse

Sistema di cassette:.....Compact cassette  
 Tipo di motore:.....CC/CC servo 2x  
 Velocità del nastro:.....4,76 cm/sec  
 Tolleranza di velocità (max. differenza nella velocità): ..... < 2%  
 Wow and flutter:.....0,1% JIS WRMS

**HEADS:** testine di registrazione/riproduzione super long-life e testine di cancellazione di ferrite a doppia fessura

Gamma di frequenza secondo:	IEC	NAB
cassette metal (tipo IV):	40-16.000 Hz	40-17.000 Hz
cassette CrO2 (tipo II):	40-16.000 Hz	40-17.000 Hz
cassette FERRO (tipo I):	40-15.000 Hz	40-16.000 Hz
Rapporto segnale/disturbi (senza Dolby NR) secondo:	IEC/DIN	NAB
cassette metal (tipo IV):	58 dB	59 dB
cassette CrO2 (tipo II):	58 dB	59 dB
cassette FERRO (tipo I):	57 dB	58 dB
Miglioramento del rapporto segnale/disturbo		
con Dolby B NR a 5 kHz:		10 dB
con Dolby C NR a 1 kHz:		18 dB
Separazione dei canali a 1 kHz:		35 dB
Soppressione del fischio in FM:		30 dB
Distorsione a livello massimo:		< 1,8%

**COLLEGAMENTI**

Ingresso di linea, tipo Cinch:.....75 mV a 47 kOhm  
 Uscita di linea, tipo Cinch:.....450 mV (Zo=2,5 kOhm)  
 Cuffia:.....Impedenza 8 - 600 Ohm  
 Telecomando:.....ESI BUS 2x Cinch

**ALIMENTAZIONE ELETTRICA**

Tensione di rete:.....ved la targhetta  
 Frecuencia di rete:.....50 e 60 Hz senza conversión  
 Potenza assorbita:.....15 W  
 Norme di sicurezza:.....IEC 65

**MOBILE, GENERALITÀ**

Material e rifinitura:.....metallo e polistirene  
 Dimensioni :.....ca. 435 x 140 x 300 mm  
 Weight:.....6 kg circa  
 Accessori:.....2 x cavo Cinch

*Con riserva di modifiche*

**RICICLAGGIO**

Per lo smaltimento di materiali di imballaggio, delle pile scariche e del vecchio apparecchio con procedure idonee per il riciclaggio, attenersi alle norme di legge vigenti a livello locale.

1. Tutto il materiale di imballaggio superfluo è stato eliminato. Abbiamo fatto tutto il possibile per rendere l'imballaggio facilmente separabile in tre singoli materiali:
  - cartone (scatola)
  - polistirolo espanso (protezione)
  - polietilene (sacchetti, foglio protettivo in schiuma di lattice)
2. L'apparecchio è costituito da materiali che possono essere riciclati se disassemblati da una società specializzata
3. **Nota:** Spegnendo di notte il modo standby, se ottiene un notevole risparmio di energia.

**BÅNDTRANSPORT** Dobbelt solenoid elektronisk autoreverse

Kassette system .....Kompakt Kassette  
 Motor type.....DC/DC servo  
 Båndhastighed.....4,76 cm/sek  
 Hastighedsvariation.....< 2%  
 Wow & flutter .....0,1 % JIS WRMS

**TOÑEHØVEDER** Super hård Metal Alloy optage/gengive hoveder og dobbelt spalte ferrit slettehoved

Frekvensområde:	DIN	NAB
Metal bånd type IV:	40-16.000 Hz	40-17.000 Hz
CrO2 bånd type II:	40-16.000 Hz	40-17.000 Hz
Normal bånd type I:	40-15.000 Hz	40-16.000 Hz
Signal/støjforhold:	DIN	NAB
Metal bånd type IV:	58 dB	59 dB
CrO2 bånd type II:	58 dB	59 dB
Normal bånd type I:	57 dB	58 dB

Forbedret S/N  
 Med Dolby B NR ved 5 kHz .....10 dB  
 med Dolby C NR ved 1 kHz .....20 dB  
 Kanalseparation ved 1 kHz.....35 dB  
 FM pilottone undertrykkelse.....30 dB  
 Forvrængning ved maksimum. niveau (CrO<sub>2</sub>).....< 1,8 %

**TILSLUTNINGEBØSNINGER**

Linie ind, Phono type .....75 mV/47 kOhm  
 Linie ud, Phono type .....450 mV/2,5 kOhm  
 Hovedtelefon.....Impedans 8-600 Ohm  
 Fjerbetjening.....ESI BUS

**STRØMFORSYNING**

Lysnetsspænding.....I overensstemmelse med type mærkaten  
 Netfrekvens .....50 og 60 Hz uden omstilling  
 Effektforbrug .....15 W  
 Sikkerhedskrav: .....IEC 65

**KABINET, GENERELT**

Materiale.....metal og polystyren  
 Dimensioner (b x hx d).....435 x140 x 300 mm ca.  
 Vægt .....6 kg ca.  
 Tilbehør .....2x 2 Cinch-kabel

*Ret til ændringer forbeholdes*

**GENBRUG AF MATERIALER**

Husk at tage hensyn til De regulativer der gælder i Deres område for bortkastning af indpakningsmaterialer, aldrig batterier og gammel apparatet.

- Der er ingen overflødige materialer i emballagen. Vi har endvidere gjort vort bedste for at gøre det muligt at sortere emballagen i 3 hovedbestanddele:
  - pap (den yderste kasse)
  - fleksibel polystyrene (buffermateriale)
  - polyethylene (poser og anden beskyttende emballering)
- Apparatet indeholder materialer, der kan genbruges.
- Bemærk:** De sparer energie ved at afbryde standby-funktionen om natten.

**BANDTRANSPORT:** Dubbelsolenoidelektronik med autoreverse

Kassettsystem: .....kompaktkasset  
 Motor typ: .....DC/DC servo 2x  
 Bandhastighet.....4,76 cm/sec.  
 Max hastighetsvariation: .....< 2%  
 Svaj: .....0,1% JIS WRMS

**TONHUVUDEN:** Super-hard Metal Alloy tonhuvuden och gap ferrite" raderhuvud

Frekvenskurvor enligt:	IEC	NAB
för metal-band (typ IV):	40-16.000 Hz	40-17.000 Hz
för CrO2-band (typ II):	40-16.000 Hz	40-17.000 Hz
för normal-band (typ I):	40-15.000 Hz	40-16.000 Hz

signal/brus-förhållande (utan Dolby NR) enligt:

	IEC/DIN	NAB
för metal-band (typ IV):	58 dB	59 dB
för CrO2-band (typ II):	58 dB	59 dB
för normal-band (typ I):	57 dB	58 dB

Förbättring av signal/brus förhållandet  
 med Dolby B NR vid 5 kHz: .....10 dB  
 med Dolby C NR vid 1 kHz: .....18 dB  
 Kanalseparation vid 1 kHz: .....35 dB  
 Pilottonsundertryckning: .....30 dB  
 Distorsion vid maxnivån (CrO<sub>2</sub>):.....< 1,8%

**UTTAG**

LINE IN, phono-uttag: .....75 mV / 47 kOhm  
 LINE OUT, phono-uttag: .....450 mV/ 2,5 kOhm)  
 Hörlursuttag:.....Impedance 8 - 600 Ohm  
 Fjärrkontroll:.....ESI BUS 2x cinch

**STRÖMFÖRSÖRJNING**

Nätspänning:.....Se typskilt  
 Nätfrekvens:.....50 eller 60 Hz utan ombyggnad  
 Effektförbrukning:.....15 W  
 Säkerhetsföreskrifter: .....SEMKO och IEC 65

**ALLMÄNT**

Material: .....metall och polystyrene  
 Dimensioner (b x h x d):.....± 435 x 140 x 300 mm  
 Vikt: .....± 6 kg  
 Tillbehör.....2x2 Cinch-kabel

*(Rätt till ändringar förbehålles.)*

**ÅTERANVÄNDNING AV MATERIALER**

Tag reda på vilka bestämmelser som gäller lokalt för hantering av förpackningsmaterialet, förbrukade batterier och din gamla anläggning.

- Allt onödigt förpackningsmaterial har tagits bort. Vi har också gjort så att materialet skall vara lätt att dela upp i tre materialgrupper för återvinning.
  - kartongpapper (låda)
  - expanderad polystyren (stötupptagare)
  - polyeten (plastpåsar, skyddsfolie)
- Apparaten består delvis av material som kan återanvändas, om den plockas isär och tas om hand av en specialfirma.
- Märk:** Om du stänger av med strömbrytaren över natten sparar du energi.

**NAUHAN KULJETUS:** Solenoidiohjattu elektroniikka

Kasetti: .....C-kasetti  
 Moottori: .....DC/DC servo 2x  
 Nauhanopeus: .....4,76 cm/sec.  
 Nopeuden vaihtelu:maks.: .....< 2%  
 Huojunta: .....0,1% JIS WRMS

**MAGNEETTIPÄÄT:** Superhard Metal Alloy toisto- ja tallennuspää; kaksoisilmaraallinen ferriittipoistopää

Taajuusvaste:	IEC	NAB
metallinauha (type IV):	40-16.000 Hz	40-17.000 Hz
krominauha (type II):	40-16.000 Hz	40-17.000 Hz
ferronauha (type I):	40-15.000 Hz	40-16.000 Hz
Häiriöetäisyys (ilman Dolby):	IEC/DIN	NAB
metallinauha (type IV):	58 dB	59 dB
krominauha (type II):	58 dB	59 dB
ferronauha (type I):	57 dB	58 dB
Häiriöetäisyyden parannus		
Dolby B 5 kHz: .....	Ilä 10 dB	
Dolby C 1 kHz: .....	Ilä 18 dB	
Kanavaerotus 1 kHz:.....	Ilä 35 dB	
Kantoaallon vaimennus:.....	30 dB	
Särö maksimitasoon (Cro2): .....	< 1,8%	

**LIITÄNNÄT**

Linjatulo, RCA: .....75 mV / 47 kOhm  
 Linjalähtö, RCA: .....450 mV (Zo=2,5 kOhm)  
 Kuulokkeet: .....impedanssi 8-600 ohmia  
 Kauko-ohjaus: .....ESI BUS 2x cinch

**KÄYTTÖJÄNNITE**

Verkköjännite: .....katso arvokilpi  
 Verkkotaajuus: .....50 - 60 Hz  
 Tehontarve: .....15 W  
 Sähköiset vaatimukset:.....IEC 65

**YLEISTÄ**

Materiaali/viimeistely: .....metalli ja polystyreeni  
 Mitat (l x k x s): .....noin 435 x 140 x 300 mm  
 Paino: .....noin 6 kg  
 Lisätarvikkeet .....2x2 cinch-johto

*(Oikeus muutoksiin varataan.)*

**KIERRÄTYS**

Suosittellemme noudatettavaksi näiden pakkausmateriaalien, vanhojen paristojen ja vanhojen laitteiden hävittämisestä annetuja paikallisia ohjeita.

1. Kaikki turha pakkausmateriaali on jätetty pois. Olemme tehneet parhaamme, että pakkauksesta olisi helppo erotella kolme materiaalia:
  - pahvi (laatikko)
  - styroxmuovi (iskuja vaimentava pehmike)
  - polyeteeni (pussit, vaahtomuovit)
2. Laitteessa käytetyt materiaalit voidaan kierrättää ja käyttää uudelleen, jos purkamisen hoitaa tähän erikoistunut yhtiö.
3. **Huom:** Katkaisemalla laitteesta valmiustoiminnon yön ajaksi säästät energiaa.

**Guarantee and Service valid for Australia**

The benefits given to the purchaser by this warranty are in addition to all other rights and remedies, which, under the Trade Practices Act or other Commonwealth or State law, the purchaser or owner has in respect of the product.

The Philips product carries the following warranties:

- C-series HiFi-systems 12 months.
- Compact Disc Players: 12 months.
- Home Audio Systems: 6 months.
- Clock radios, portable radios, cassette recorders, cassette players and radio recorders: 90 days.

Any defect in materials or workmanship occurring within the specified period from the date of delivery, will be rectified free of charge by the retailer from whom this product was purchased.

**Note:** Please retain your purchase docket to assist prompt service.

**Conditions of this warranty**

1. All claims for warranty service must be made to the retailer from whom this product was purchased. All transport charges incurred in connection with warranty service or replacement will be paid by the purchaser.
2. These warranties do not cover batteries and extend only to defects in materials or workmanship occurring under normal use of the product where operated in accordance with our instructions.

**Philips Consumer Products Division,  
Technology Park  
Figtree Drive, Australia Centre  
Homebush 2140  
New South Wales**

**Guarantee and Service for New Zealand**

Thank-you for purchasing this quality Philips product.

Philips New Zealand Ltd guarantees this product against defective components and faulty workmanship for a period of 12 months. Any defect in materials or workmanship occurring within 12 months from the date of purchase subject to the following conditions will be rectified free of charge by the retailer from whom this product was purchased.

**Conditions**

1. The product must have been purchased in New Zealand. As proof of purchase, retain the original invoice or cash receipt indicating the date of purchase.
2. The guarantee applies only to faults caused by defective components, or faulty workmanship on the part of the manufacturer.
3. The guarantee does not cover failures caused by misuse, neglect, normal wear and tear, accidental breakage, use on the incorrect voltage, use contrary to operating instructions, or unauthorised modification to the product or repair by an unauthorised technician.
4. Reasonable evidence (in the form of a sales docket or completed guarantee card) must be supplied to indicate that the product was purchased no more than 12 months prior to the date of your claim.
5. In the event of a failure, Philips shall be under no liability for any injury, or any loss or damage caused to property or products other than the product under guarantee.

This guarantee does not prejudice your rights under common law and statute, and is in addition to the normal responsibilities of the retailer and Philips.

**How to claim**

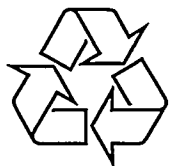
Should your Philips product fail within the guarantee period, please return it to the retailer from whom it was purchased. In most cases the retailer will be able to satisfactorily repair or replace the product.

However, should the retailer not be able to conclude the matter satisfactorily, or if you have other difficulties claiming under this guarantee, please contact

**The Guarantee Controller  
Philips New Zealand Ltd.  
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☎ (09) 84 94 160  
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