

Audio CD Recorder / 3 CD Changer



Read this manual first!

Congratulations on purchasing this Philips product. We've included everything you need to get started. If you have any problems, Philips Representatives can help you get the most from your new product by explaining:

- Hookups,
- First Time Setup, and
- Feature Operation.

Do not attempt to return this product to the store.

For fast help, call us first!

1-800-531-0039

Thank you for making Philips a part of your home!



Let's make things better.



PHILIPS

Return your Warranty Registration card today to ensure you receive all the benefits you're entitled to.

- Once your Philips purchase is registered, you're eligible to receive all the privileges of owning a Philips product.
- So complete and return the Warranty Registration Card enclosed with your purchase at once, and take advantage of these important benefits.

Warranty Verification

Registering your product within 10 days confirms your right to maximum protection under the terms and conditions of your Philips warranty.

Owner Confirmation

Your completed Warranty Registration Card serves as verification of ownership in the event of product theft or loss.

Model Registration

Returning your Warranty Registration Card right away guarantees you'll receive all the information and special offers which you qualify for as the owner of your model.

PHILIPS

Congratulations on your purchase, and welcome to the "family!"

Dear Philips product owner:

Thank you for your confidence in Philips. You've selected one of the best-built, best-backed products available today. And we'll do everything in our power to keep you happy with your purchase for many years to come.

As a member of the Philips "family," you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry.

What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.

And most importantly you can count on our uncompromising commitment to your total satisfaction.

All of this is our way of saying welcome – and thanks for investing in a Philips product.

Sincerely,

Lawrence J. Blanford
President and Chief Executive Officer

P.S. Remember, to get the most from your Philips product, you must return your Warranty Registration Card within 10 days. So please mail it to us right now!



Know these *safety* symbols



This "bolt of lightning" indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove product covering.



The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, and fully insert.

For Customer Use

Enter below the Serial No. which is located on the rear of the cabinet. Retain this information for future reference.

Model No. _____

Serial No. _____

MAC5097



PHILIPS

Visit our World Wide Web Site at <http://www.philips.com>

Canada

English:

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Français:

Cet appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables dans la règlement sur le brouillage radioélectriques édicté par le ministère des communications du Canada.

English ————— 4

Français ————— 31

Español ————— 59

English

Français

Español

This warning label is located on the rearside and inside this laser product.

CAUTION: INVISIBLE LASER RADIATION WHEN OPEN.DO NOT STARE INTO BEAM
DANGER: INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.
VARO! AVATTAESSA JA SUOJALUKITUS OHITEJTAESSA OLET ALTTIINANAKYMATTOMAAALLE LASERSATEILYLLE.ALA KATSO SATEESEEN.
VARNING! OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPARREN ÄR URKOPPLAD. BETRAKTA EJ STRALEN

or

DANGER - Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can be used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

NOTE

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning this equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :


- reorient or relocate the receiving antenna.
- increase the separation between the equipment and receiver.
- connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- consult the dealer or an experienced radio/TV technician for help.

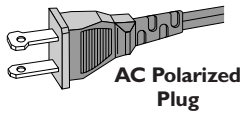
IMPORTANT

THIS PRODUCT WAS FCC VERIFIED UNDER TEST CONDITIONS THAT INCLUDED USE OF SHIELDED CABLES AND CONNECTORS BETWEEN SYSTEM COMPONENTS. IT IS IMPORTANT THAT YOU USE SHIELDED CABLES TO REDUCE THE POSSIBILITY OF CAUSING INTERFERENCE TO RADIOS, TELEVISION SETS AND OTHER ELECTRONIC DEVICES. IF YOU HAVE ANY PROBLEMS CONTACT YOUR DEALER.

ANY CHANGE OR MODIFICATIONS TO THE EQUIPMENT BY THE USER NOT EXPRESSLY APPROVED BY THE GRANTEE OR MANUFACTURER COULD VOID THE USER'S AUTHORITY TO OPERATE SUCH EQUIPMENT.

IMPORTANT SAFETY INSTRUCTIONS

1. **Read these instructions.**
2. **Keep these instructions.**
3. **Heed all warnings.**
4. **Follow all instructions.**
5. **Do not use this apparatus near water.**
6. **Clean only with a dry cloth.**
7. **Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.**
8. **Do not install near any heat sources** such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. **Do not defeat the safety purpose** of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. **Protect the power cord** from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. **Only use attachments/accessories** specified by the manufacturer.
12.  **Use only with a cart**, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. **Unplug this apparatus** during lightning storms or when unused for long periods of time.
14. **Refer all servicing** to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as if the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, or when the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



15. **Battery usage CAUTION** – To prevent battery leakage which may result in bodily injury or damage to the unit:
 - Install **all** batteries correctly, **+** and **-** as marked on the unit.
 - Do not mix batteries (**old** and **new** or **carbon** and **alkaline**, etc.).
 - Remove batteries when the unit is not used for a long time.

EL 6475-E002: 01/3

CAUTION

Use of controls or adjustments or performance of procedures other than herein may result in hazardous radiation exposure or other unsafe operation.

The set complies with the FCC-Rules, Part 15 and with 21 CFR 1040.10. Operation is subject to the following two conditions:

1. **This device may not cause harmful interference, and**
2. **This device must accept any interference received, including interference that may cause undesired operation.**

LIMITED WARRANTY

AUDIO CD RECORDER

One Year Free Labor

One Year Free Service on Parts

This product must be carried in for repair:

WHO IS COVERED?

You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase.

WHAT IS COVERED?

Warranty coverage begins the day you buy your product. For one year thereafter, all parts will be repaired or replaced, and labor is free. After one year from the day of purchase, you pay for the replacement or repair of all parts, and for all labor charges. All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the product expires, the warranty on all replaced and repaired parts also expires.

WHAT IS EXCLUDED?

Your warranty does not cover:

- labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics Company.
- reception problems caused by signal conditions or cable or antenna systems outside the unit.
- a product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)
- a product that is used for commercial or institutional purposes.

WHERE IS SERVICE AVAILABLE?

Warranty service is available in all countries where the product is officially distributed by Philips Consumer Electronics Company. In countries where Philips Consumer Electronics Company does not distribute the product, the local Philips service organisation will attempt to provide service (although there may be a delay if the appropriate spare parts and technical manual(s) are not readily available).

MAKE SURE YOU KEEP...

Please keep your sales receipt or other document showing proof of purchase. Attach it to this owner's manual and keep both nearby. Also keep the original box and packing material in case you need to return your product.

BEFORE REQUESTING SERVICE...

Please check your owner's manual before requesting service. Adjustments of the controls discussed there may save you a service call.

TO GET WARRANTY SERVICE IN U.S.A., PUERTO RICO OR U.S. VIRGIN ISLANDS...

Take the product to a Philips factory service center (see enclosed list) or authorized service center for repair. When the product has been repaired, you must pick up the unit at the center. Centers may keep defective parts. (In U.S.A., Puerto Rico and U.S. Virgin Islands, all implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the duration of this express warranty. But, because some states do not allow limitations on how long an implied warranty may last, this limitation may not apply to you.)

TO GET WARRANTY SERVICE IN CANADA...

Please contact Philips at:

1-800-661-6162 (French Speaking)

1-800-363-7278 (English Speaking)

(In Canada, this warranty is given in lieu of all other warranties. No other warranties are expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose. Philips is not liable under any circumstances for any direct, indirect, special, incidental or consequential damages, howsoever incurred, even if notified of the possibility of such damages.)

REMEMBER...

Please record the model and serial numbers found on the product below. Also, please fill out and mail your warranty registration card promptly. It will be easier for us to notify you if necessary.

MODEL # _____

SERIAL # _____

This warranty gives you specific legal rights. You may have other rights which vary from state/province to state/province.

Philips Service Solutions Group, P.O. Box 2976, Longview, Texas 75606 (903) 242-4800

EL4965F005 / MAC 4110 / 1-97

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General information

Environmental information

All redundant packing material has been omitted. We have done our utmost to make the packaging easily separable into three mono materials: cardboard (box), polystyrene foam (buffer) and polyethylene (bags, protective foam sheet).

Your set consists of materials which can be recycled if disassembled by a specialized company. Please observe the local regulations regarding the disposal of packing materials, exhausted batteries and old equipment.

As an ENERGY STAR® partner, Philips has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.



Specifications

Subject to modification without notice.

General

Power consumption	18 W
Power consumption in Standby	< 0.65 W
Operating temperature.....	40-95 °F
Weight.....	11 lbs.
Dimensions.....	17.1" x 13.7" x 4.8"

Audio

Frequency response	2 Hz-22.050 Hz
Playback S/N (A-weighted)	115 dB
Playback S/N.....	110 dB
Playback Dynamic Range	98 dB
Playback Total Harmonic Distortion	- 96 dB
Channel separation	105 dB
Recording S/N (A-weighted)	94 dB
Recording S/N digital without SRC.....	equal to source
Recording Dynamic Range	94 dB
Recording Total Harmonic Distortion + noise.....	- 86 dB
Digital/Optical input	12-96 kHz

Laser

Type.....	Semiconductor laser GaAlAs
Wave length	775-795 nm (at 25 °C)
Output power	2.5 mW (Read.) 35 mW (Write)
Beam divergence.....	60 degrees

CAUTION

Use of controls or adjustments or performance of procedures other than herein may result in hazardous radiation exposure or other unsafe operation.

Supplied accessories

- 2 Analog audio cords (with red and white plugs)
- Power cord
- 2 batteries for the remote control, size AA
- Remote control

Discs for recording

For recording, make sure to use special audio discs only. These discs are marked with "Digital Audio" and the logos shown below.

There are two different types of audio discs for the use on this CD recorder:

– CD-Audio Recordable (CDR) discs

These discs can be recorded on once and play in all standard CD players and CD recorders, when they are finalized.



– CD-Audio ReWritable (CDRW) discs

These discs can be recorded on, erased and re-recorded many times and play in CDRW compatible CD players and CD recorders, when they are finalized.



- All Philips CD players and CD recorders with the sticker shown here are CDRW compatible.



To ensure proper working of the set we recommend the use of Philips audio CDR and audio CDRW discs only.

Note: Do not use a computer CDR or CDRW as recording will not work!

Recording is permissible insofar as copyright or other rights of third parties are not infringed upon.

In certain countries including the UK and certain Commonwealth countries, use of the product as shown or suggested in this user manual may require the permission of copyright holders.

Discs for playback

For playback on this CD changer and CD recorder you can use following audio discs:

- All pre-recorded audio CDs
- All audio CDR and audio CDRW discs
- MP3-CDs (CD-ROMs with MP3 tracks) - make sure filename ends with .mp3

Note: CDR(W) discs that are not finalized can only be played in the CD recorder tray.

CAUTION

INVISIBLE RADIATION WHEN OPEN.
AVOID EXPOSURE TO BEAM.

Note: This warning is located inside the enclosure.

General information

Some words about MP3

The revolutionary new music compression technology MP3 (MPEG Audio Layer-3) enables to shrink down original digital audio sound data with a factor of up to 10 without losing significant sound quality. This allows you to record up to 10 hours of CD-like quality music on a single CD-ROM.

Making your own MP3-CD

Basically there are two sources for MP3 music on CD. You can either create ("rip") it from your own digital audio CDs or download legal MP3 music from the Internet.

Record ("burn") the music from your hard disc on CD-ROM with your home PC (**make sure filename ends with .mp3**). Once finished, you can play your MP3-CD on this set and enjoy the music.

Data rate

The data rate is of great importance with MP3. It indicates how fast bits are transferred.

Stereo music on a CD shows a data rate of about 1400 kilobits per second (kbps). **To achieve a good MP3 quality a bit rate of 128 kbps is recommended.** As the encoding rate is user-selectable, make sure to reach this data rate for MP3 as recordings less than 128 kbps will suffer from a degradation in sound quality.

Recording

Downloading MP3 files from the Internet or ripping songs from your own digital audio CDs is a delicate process, also influenced by the quality of the encoder program and speed of your PC. This may sometimes result in "drop-outs" which you may experience while listening to your MP3-CD.

In any case make sure to use a recording speed not faster than indicated on the CD-ROM and avoid running other programs simultaneously on your PC during the recording process.

It is not possible to "burn" an MP3-CD on this CD recorder.

It is not possible to record from an MP3-CD.

Supported formats

Following formats are supported on this CD recorder/changer:

- **Disc format:** ISO 9660 or Joliet
- **Filename:** .mp3 (tracks), .m3u or .pls (playlists)
- **Bit rate:** 32–320 kbps (128 kbps advised) or variable bit rate

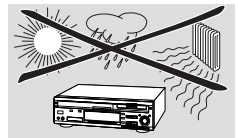
*Note: Use the ISO 9660 disc format when burning the CD-ROM. **UDF disc format (e.g. "DirectCD" or "WinOnCD") is not supported.***

Maintenance

Clean the set with a soft, slightly dampened lint-free cloth. Do not use any cleaning agents as they may have a corrosive effect.



Do not expose the set, batteries or CDs to humidity, rain, sand or excessive heat (caused by heating equipment or direct sunlight).

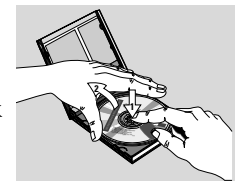


The lenses may cloud over when the set is suddenly moved from cold to warm surroundings. Playing a CD(RW) is not possible then. Leave the set in a warm environment until the moisture evaporates.

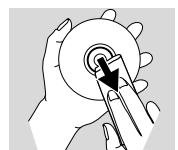
Disc handling

For recording it is very important to use dust and scratch free discs.

To take a CD(RW) out of its box easily, press the center spindle while lifting the CD(RW). Always pick up a CD(RW) by the edge and put it back after use. Never write on a CD or attach a sticker to it. Write only on the printed side of a CDR or CDRW and only with a soft felt-tipped pen.

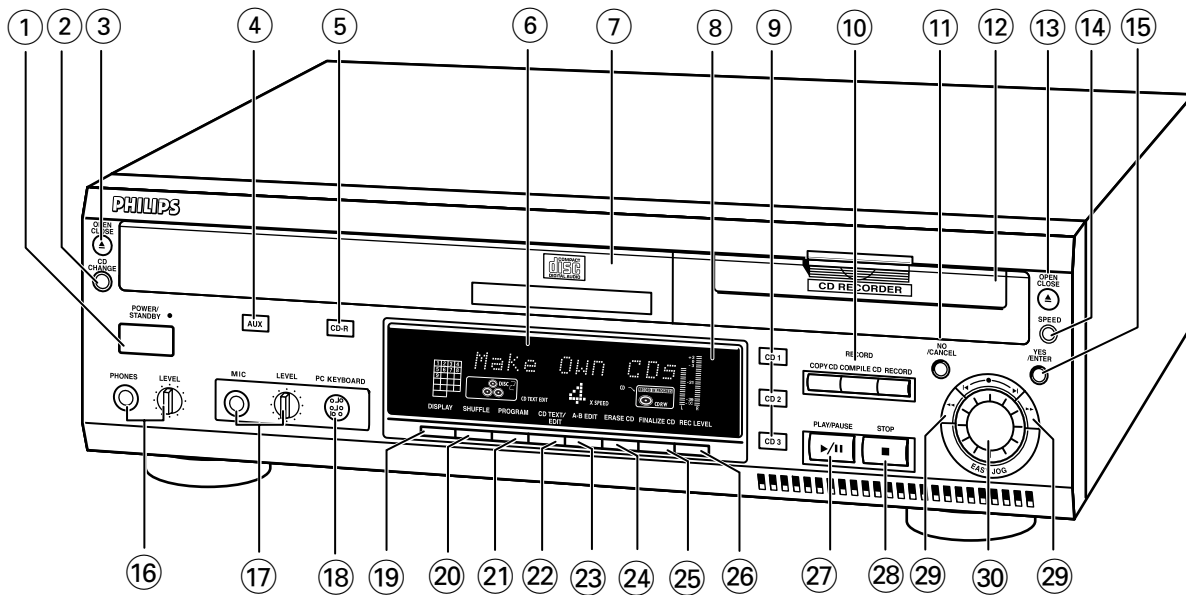


To clean a CD(RW), wipe it in a straight line from the center toward the edge using a soft, lint-free cloth. A cleaning agent may damage the disc!



Controls

English



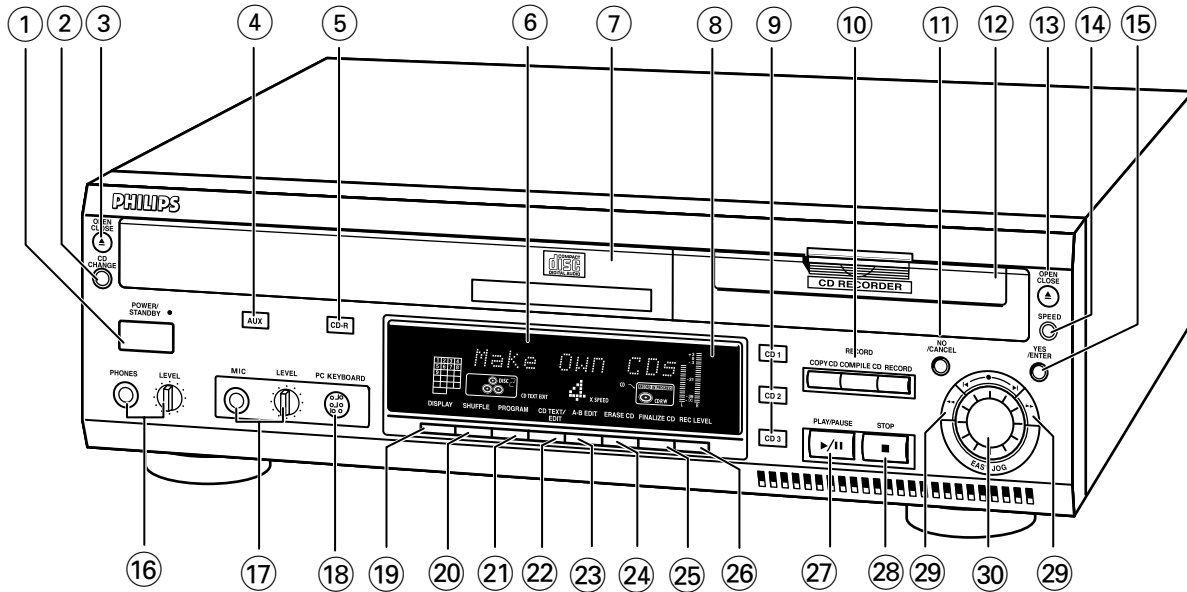
Controls

General

- ① **POWER**
switches the CD recorder/changer ON and OFF
STANDBY indicator
lights up when the set is in Standby
- ④ **AUX**
selects external input
- ⑤ **CDR**
selects CD recorder
- ⑥ **Display**
information screen
- ⑧ **IR sensor**
receives signals from the remote control
- ⑨ **CD 1, 2, 3**
selects CD changer and switches to CD 1, 2 or 3
- ⑪ **NO/CANCEL**
cancels a selection
- ⑮ **YES/ENTER**
confirms a selection
- ⑮ **PHONES**
jack for headphones
LEVEL
headphones volume control
- ⑰ **MIC(rophone)**
microphone jack
LEVEL
microphone volume control
- ⑱ **PC KEYBOARD**
PC keyboard connection
- ⑲ **DISPLAY**
selects display information
- ⑳ **SHUFFLE**
plays discs in changer and recorder or program in random order
- ㉑ **PROGRAM**
opens/closes program memory
- ㉒ **CD TEXT/edit**
- makes CD text scroll over display once
- opens Text Edit mode
- ㉗ **PLAY/PAUSE ►/II**
starts play/interrupts play/recording
- ㉘ **STOP ■**
stops playback or recording
- ㉙ **◀ ▶**
- searches backward (◀) and forward (▶)
- controls the cursor in various menus
- ㉚ **◀ EASY JOG ▶**
selects next/previous menu item or track

Controls

English



CD changer

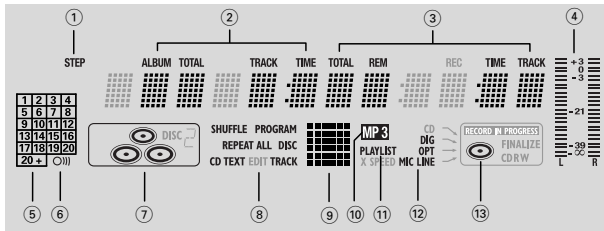
- ② **CD CHANGE**
selects next disc in CD changer
- ③ **OPEN/CLOSE ▲**
opens/closes changer tray
- ⑦ **Disc tray**
- ⑳ **A-B EDIT**
opens A-B Edit mode to create your own 'tracks'

CD recorder

- ⑩ **Recording keys**
COPY CD - selects high speed with auto finalize recording mode
COMPILE CD - selects high speed recording mode/opens program memory
RECORD - selects other recording modes
- ⑫ **Disc tray**
- ⑬ **OPEN/CLOSE ▲**
opens/closes recorder tray
- ⑭ **SPEED**
selects recording speed
- ⑳ **ERASE CD**
erases recordings on CDRW
- ㉑ **FINALIZE CD**
finalizes/unfinalizes disc
- ㉒ **REC(ording) LEVEL**
enables the EASY JOG key to set the recording level control

Display indications

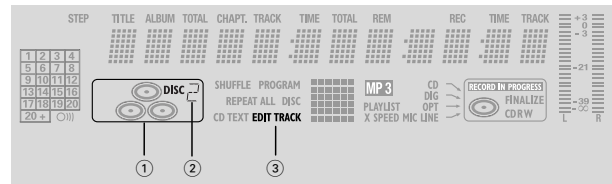
General



- ① **STEP**
indicates the number of tracks in a program
- ② **TOTAL TIME** - total time of recording source
TRACK - track number
ALBUM - album number (MP3)
TOTAL TRACK - total amount of tracks on the disc
- ③ **TRACK TIME** - track time
REM TRACK TIME - remaining track time
TOTAL REM TIME - total remaining time
- ④ **L/R ==**
indicates the audio signal level
- ⑤ **Music calender** (not active for MP3 discs) - indicates:
- number of tracks on a disc or in a program
- number of track in play
- ⑥ **O)))** remote control active
- ⑦ - CD(s) inserted in compartment
1, 2 and/or 3
- ⑧ **SHUFFLE** - plays tracks in random order
PROGRAM - flashes during programming/ lights in program mode
REPEAT ALL - lights up when all tracks on all discs in the set are repeated/when a program is repeated
REPEAT DISC - lights up when a complete disc is repeated
REPEAT TRACK - lights up when a track is repeated
CD TEXT - CDTEXT available
- ⑨ **Status matrix**
 - playback
 - pause
 - fast search forward
 - fast search backward
 - stop
- ⑩ **MP3**
CD selected contains MP3 files
- ⑪ **PLAYLIST**
playlist of MP3 album selected

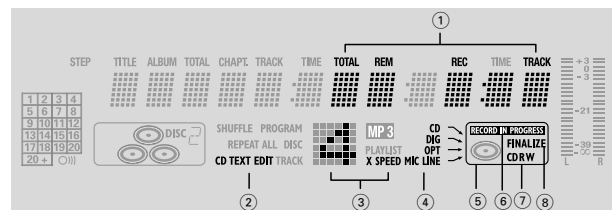
- ⑫ **DIG(ital)** - coaxial digital input selected
OPT(ical) - optical digital input selected
LINE - analog line input selected
MIC LINE - microphone input selected
- ⑬ - CD inserted

CD Changer



- ① - CD changer selected
- ② **DISC** - disc in play or selected
- ③ **EDIT TRACK**
Lights up when the A-B- Edit feature is activated

CD recorder

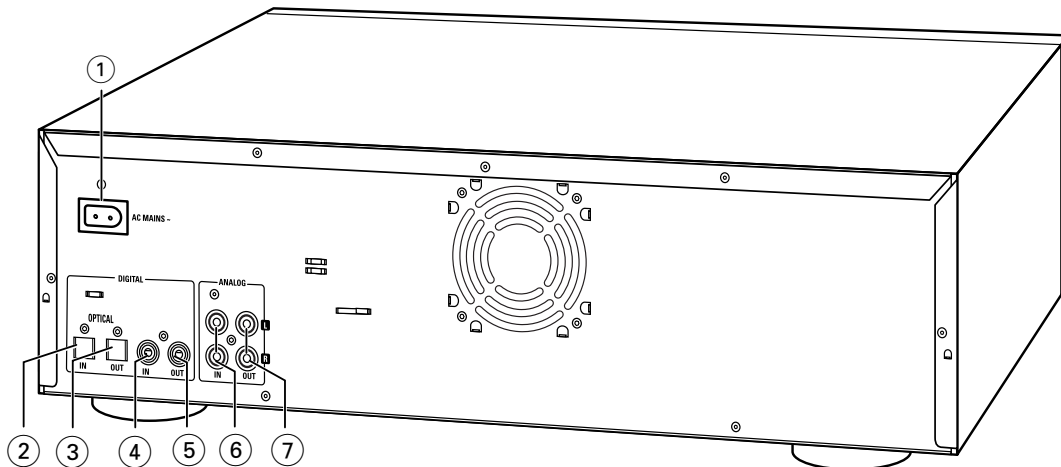


- ① **TOTAL REM REC TIME** - remaining recording time
REM REC TIME - remaining time on CDR(W)
REM TIME - remaining time when finalizing erasing
- ② **CD TEXT EDIT** - lights up when the Text Edit feature is activated
- ③ **Status matrix**
 - recording active (flashes)
 - **X SPEED**- recording speed
- ④ **CD** - internal recording activated
DIG(ital) - digital input selected for external recording
OPT(ical) - optical input selected for external recording
LINE - analog input selected for external recording
MIC - microphone input selected for internal/external recording
- ⑤ - CD recorder selected
- ⑥ **RECORD IN PROGRESS** - lights during recording
- ⑦ **CD** - CD inserted (a pre-recorded CD or finalized CD-R or CD-RW disc)
CD R - unfinalized CD R disc inserted
CD RW - unfinalized CD RW disc inserted
- ⑧ **FINALIZE** - lights up during finalizing a recording, or when the disc will be finalized after the current recording.

Connections

Installation

English



Connections

- ① Connection to power
- ② **OPTICAL IN**
connects to the digital optical output of an external digital source (CD player; DVD, DAT, etc.), so you can record from this source (AUX Optical)
- ③ **OPTICAL OUT**
connects to the digital optical input of an amplifier/receiver, so you can listen to playback of the set via the amplifier/receiver.
- ④ **DIGITAL IN**
connects to the digital coaxial output of an external digital source (CD player; DVD, DAT, etc.), so you can record from this source (AUX Digital)
- ⑤ **DIGITAL OUT**
connects to the digital coaxial input of an amplifier/receiver or digital recording device, so you can listen to playback of the set via the amplifier/receiver.
- ⑥ **ANALOG IN**
connects to the line (analog) output of an amplifier/receiver or other analog source (tape deck, tuner etc.), so you can record from this source (AUX Analog). For recording from a record player both recorder and record player should be connected to an amplifier/receiver
- ⑦ **ANALOG OUT**
connects to the line (analog) input of an amplifier/receiver or analog recording device, so you can listen to playback of the set via the amplifier/receiver.

Setup recommendations

- Place the set on a solid, vibration free surface.
- Make sure there is sufficient space around the set to prevent overheating.
- Do not place the set near a source of heat or in direct sunlight.
- Do not use the set under extremely damp conditions.
- If the set is placed in a cabinet, make sure that a 2.5 cm space repower free on all sides of the CD recorder for proper ventilation.
- Active mobile phones near to the set may cause malfunctions.
- Place the set below your receiver.

Connections general

NEVER MAKE OR CHANGE CONNECTIONS WITH THE POWER SWITCHED ON

For playback on both recorder deck and changer deck the set should be connected to your amplifier/receiver. For this the following outputs are present:

- Digital optical output (OPTICAL OUT);
- Digital coaxial output (DIGITAL OUT);
- Analog output (ANALOG OUT).

For external recording the following inputs are present:

- Digital optical input (OPTICAL IN);
- Digital coaxial input (DIGITAL IN);
- Analog input (ANALOG IN).

These inputs can be connected to the corresponding output(s) of your amplifier/receiver or directly to the corresponding output(s) of the external source. Record players cannot be connected directly to the set.

The connections you make will depend upon the possibilities your audio equipment offers and how you are going to use the set. Please refer to the user manuals for your other audio equipment first.

Digital recordings (optical or coaxial) give the best performance in audio and usability.

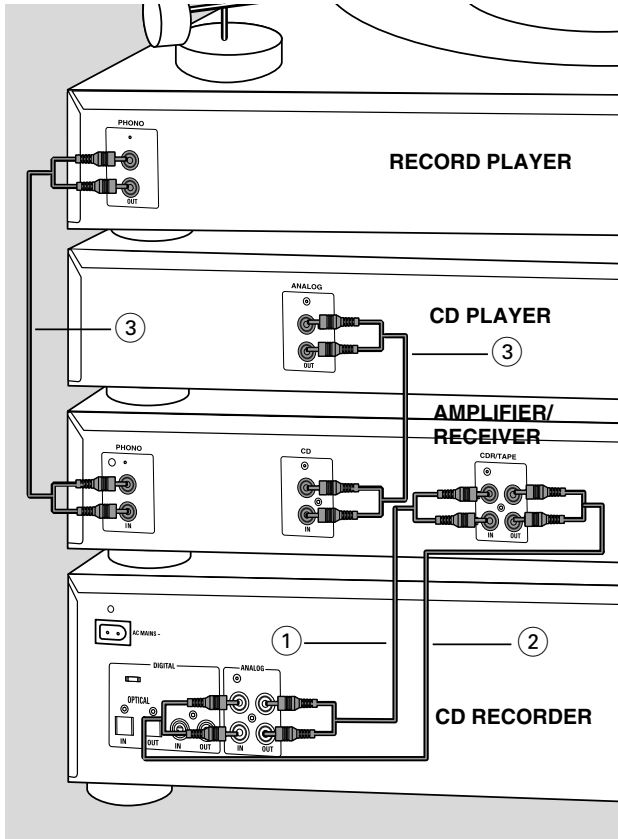
If possible, always make both digital and analog connections. In this way you can always make analog recordings when digital recording is not possible.

Installation

English

Analog connections

These connections are required for playback and recording via an amplifier/receiver, equipped with an analog in- and outputs.

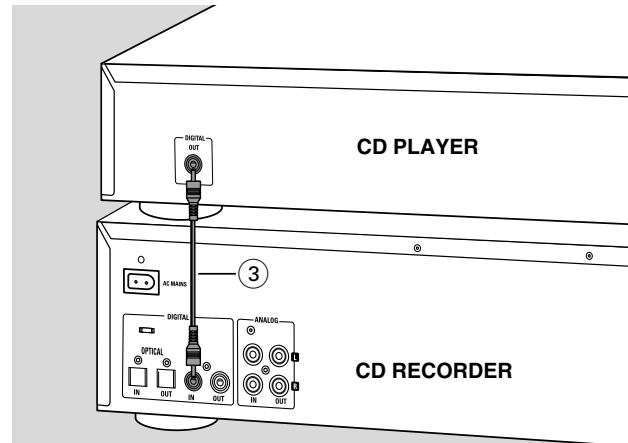


- 1 Connect supplied audio cord between the ANALOG OUT-jacks on the set and the ANALOG input jacks of the amplifier/receiver (TAPE IN, CD-R, AUX or PLAY IN). Insert the red plugs into the R jacks, and the white plugs into the L jacks.
- 2 Connect supplied audio cord between the ANALOG IN-jacks on the set and the analog outputs of the amplifier/receiver (CDR OUT, TAPE OUT, AUX OUT, REC OUT etc.). Insert the red plugs into the R jacks, and the white plugs into the L jacks.
- 3 Connect all other components of your system (tape deck, CD player, tuner, record player etc.) via their ANALOG OUT-jacks to the appropriate analog input jacks of the amplifier/receiver (CD IN, TUNER IN, AUX IN, PHONO IN etc.).
 → Any analog device, connected to the amplifier/receiver can now be used as recording source (AUX Analog).

Digital connections

Direct digital coaxial connection

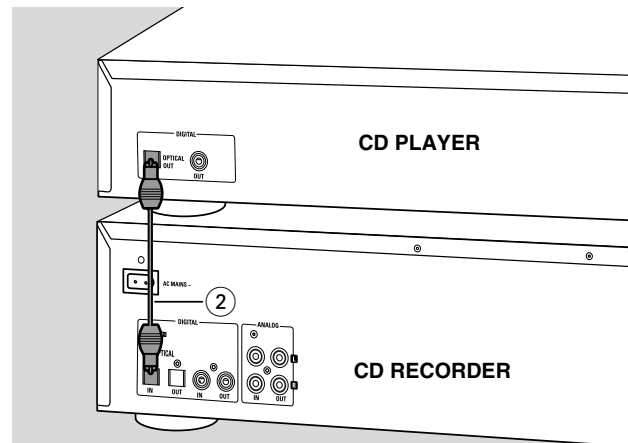
This connection is required for direct recording from a digital coaxial source (e.g a CD player, DVD, DAT).



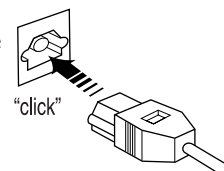
- 1 Connect a digital coaxial cord between the DIGITAL IN-jack on the set and the DIGITAL OUT jack of the digital source.
 → Recording can now be done via the digital coaxial input (AUX Digital).

Direct digital optical connection

This connection is required for direct recording from a digital optical source (e.g a CD player, DVD, DAT).



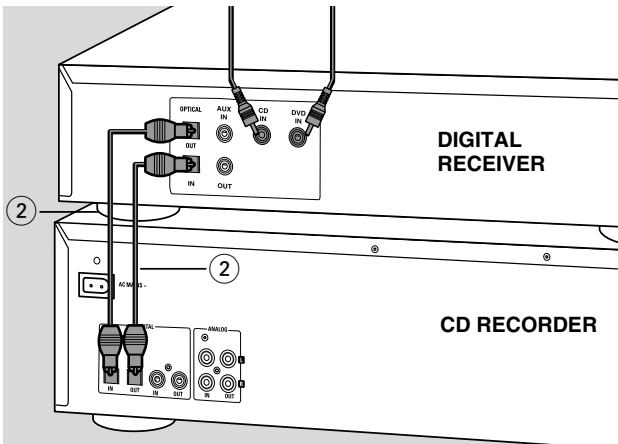
- 1 Remove the dust caps from the digital optical connections of both source and CD recorder. Keep the caps in a safe place.
- 2 Connect an optical fibre-optic cord between the OPTICAL IN jack of the set and the OPTICAL OUT jack of the source.
 Make sure you insert both plugs fully, until a click is heard.
 → Recording can now be done via the digital optical input (AUX Optical).



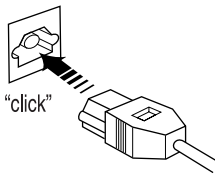
Installation

Digital optical connections via a digital receiver

If you have a receiver with digital optical in- and outputs, these connections allow you to make digital recordings from various sources, connected to the receiver.

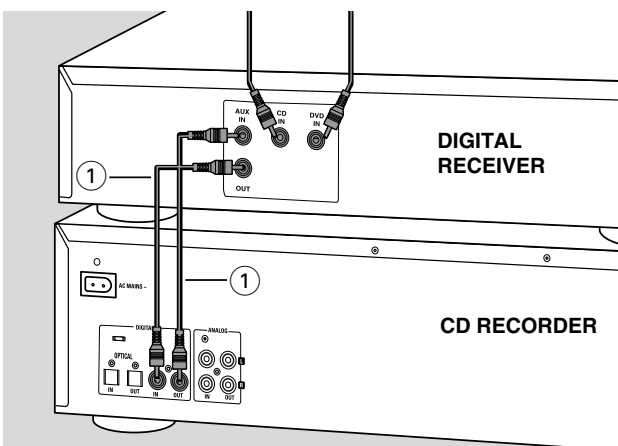


- 1 Remove the dust caps from the digital optical connections of both source and CD recorder. Keep the caps in a safe place.
- 2 Connect an optical fibre-optic cord between the OPTICAL IN- and OUT jacks of the set and optical in- and output jacks on the digital receiver. Make sure you insert both plugs fully, until a click is heard.
 - Any digital device, connected to the digital input jacks of the digital receiver (e.g. CD and DVD) can now be used as recording source.



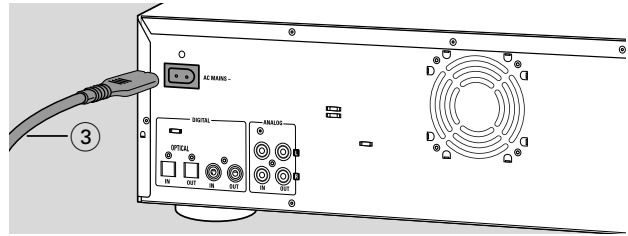
Digital coaxial connections via a digital receiver

If you have a receiver with digital coaxial in- and outputs, these connections allow you to make digital recordings from various sources, connected to the receiver.



- 1 Connect a digital coaxial cord between the DIGITAL IN- and OUT jacks on the set and e.g. the (digital) AUX in- and output jacks on the digital receiver.
 - Any digital device, connected to the digital input jacks of the digital receiver (e.g. CD and DVD) can now be used as recording source.

Power supply



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

- 1 Check whether the power voltage as shown on the type plate corresponds to your local power voltage. If it does not, consult your dealer or service organisation.
 - 2 Make sure all connections have been made before switching on the AC power supply.
 - 3 Connect the power cord supplied to AC MAINS ~ and to the wall outlet. This switches on the AC power supply.
 - 4 Press POWER to switch on the set.
 - Welcome To PHILIPS Audio will be displayed.
- Press POWER again to switch off the set.

When the set is switched off, it is still consuming some power. To disconnect the set from the power completely, remove the power plug from the wall outlet.

Demo mode

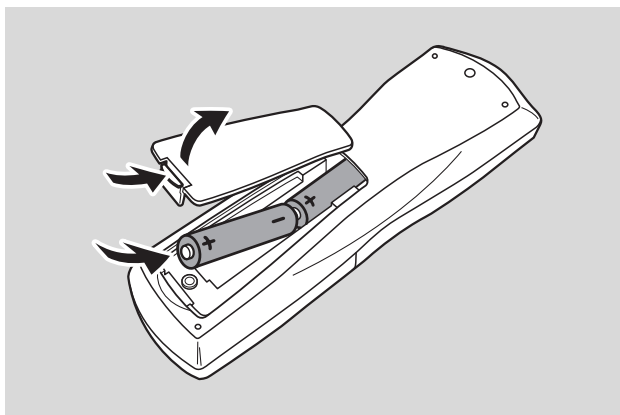
The demo mode displays various features of the set and will start automatically when no key has been pressed for several minutes or during Standby mode.

To cancel demo mode

- Keep STOP ■ on the set pressed for at least 5 seconds.
 - The demo mode is cancelled permanently.

Remote control

Inserting batteries in the remote control



- 1 Open the battery compartment cover.
- 2 Insert 2 batteries (AA, LR6 or UM-3; as supplied) as shown.
- 3 Replace the cover.

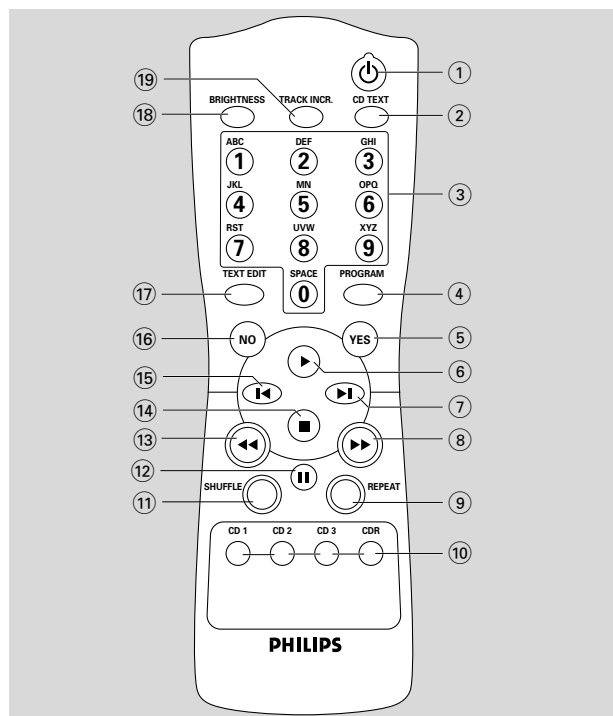
Note: We recommend you use 2 batteries of the same type and condition.

Batteries contain chemical substances, so they should be disposed of properly.

Note: Unless stated otherwise all controls are on the front of the recorder. When provided on the remote control, you can also use the corresponding buttons, after selecting CD recorder or CD changer.

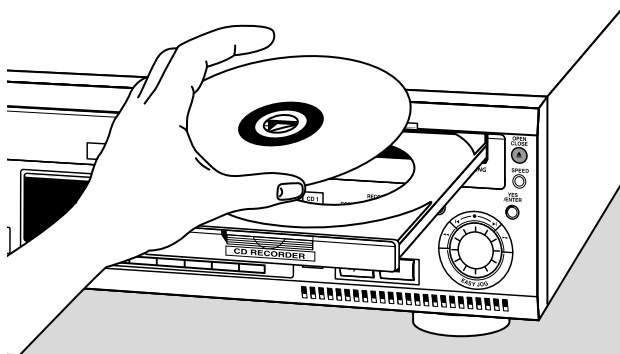
Remote control commands

- ① **⏻**
switches to Standby
- ② **CDTEXT**
scrolls CD text
- ③ **Number/alphabet keys 0 - 9**
- selects a track by number
- selects character for text input
SPACE inserts space during text input
- ④ **PROGRAM**
opens/closes program memory
- ⑤ **YES**
confirms a selection
- ⑥ **▶**
starts playback
- ⑦ **▶|**
selects next menu item or track
- ⑧ **▶▶**
- searches forward
- cursor control in various menus
- ⑨ **REPEAT**
repeat play
- ⑩ **CD 1, 2, 3**
selects disc in CD changer
- CDR**
selects CD recorder
- ⑪ **SHUFFLE**
plays all discs or program in random order
- ⑫ **||**
interrupts playback/recording
- ⑬ **◀◀**
- searches backward
- cursor control in various menus
- ⑭ **■**
stops playback or recording
- ⑮ **◀|**
selects previous menu item or track
- ⑯ **NO**
cancels a selection
- ⑰ **TEXT EDIT**
opens Text Edit mode
- ⑱ **BRIGHTNESS**
sets the brightness of the display
- ⑲ **TRACK INCR(ement)**
- selects automatic track increment mode
- increments track number during recording



Loading discs

Loading discs



Important!

1) This set is designed for regular CD(RW)s. Therefore, do not use any accessories such as disc stabilizer rings or CD treatment sheets, etc. as offered on the market, because they may cause jamming of the changer mechanism.

2) Do not load more than one disc into one tray.

- 1 **CD changer:** Press OPEN/CLOSE ▲ to open the disc compartment.
→ OPEN Changer lights up.
CD recorder: Press OPEN/CLOSE ▲ to open the disc tray.
→ OPEN CDR lights up.
Note: Opening the changer disc compartment or recorder disc tray will clear any program present.
- 2 **CD changer:** Insert CDs in the two outer disc trays, label side up.

○ To insert a third disc press CD CHANGE.
→ The CD carousel tray will rotate once.
CD recorder: Insert a disc in the tray, label side up.
- 3 **CD changer:** Press OPEN/CLOSE ▲ again or gently push the compartment to close it.
→ Reading is displayed.
→ The display will show **CD**, the number of the the last selected tray, its number of tracks and total playing time.
CD recorder: Press OPEN/CLOSE / again or gently push the tray to close it.
→ Reading is displayed.
→ If an unfinalized disc is inserted, **Initializing** is displayed.
→ The display will show the type of disc inserted, its number of tracks and the total playing time of the disc.

Playing

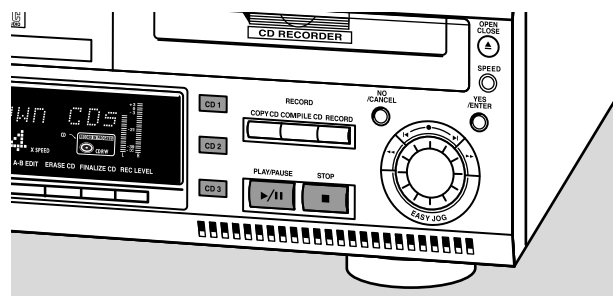
MP3 discs only:

- Reading is displayed and **MP3** lights up.
- The first track name of the current album is displayed.

Changing discs during play (on CD changer only)

- 1 Press OPEN/CLOSE to open the disc compartment.
→ Open Changer lights up.
- 2 The CDs in the two outer disc trays can be changed while play or recording continues.

Playing



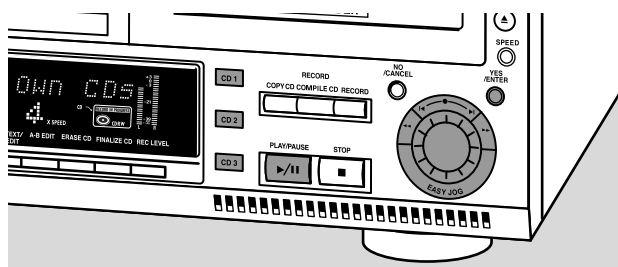
- 1 Press CDR, CD 1, 2 or 3 to select the required disc.
- 2 Press PLAY/PAUSE ►/|| to start play.
→ CDR, CD 1, 2 or 3, the number of the current track and elapsed playing time are displayed.

○ Press DISPLAY repeatedly to display:
 - track number; remaining playing time of current track
 - track number; remaining playing time of disc
 - track number; actual playing time of current track
 - for MP3 discs, pressing DISPLAY will display album number; track number and track name.
- 3 To stop play, press STOP ■.
→ CDR, CD 1, 2 or 3, the number of tracks and the total playing time of the disc appear on the display.
→ When an MP3 disc was playing, the first track name of the current album is displayed.

○ To interrupt play temporarily, press PLAY/PAUSE ►/||.
→ The time where playback is interrupted is blinking.

○ To continue play, press PLAY/PAUSE ►/|| again.

Track selection and searching



Track selection in STOP mode

- 1 First select the required disc with CDR, CD 1, 2 or 3.
- 2 Rotate the ◀ EASY JOG ▶ control to select the required track number.
- 3 Press PLAY/PAUSE ▶/|| to start playing.

Track selection during play

- 1 Rotate the ◀ EASY JOG ▶ control to select the required track number.
 - Play skips to the beginning of the selected track.

Notes:

Track numbers can also be selected with the ◀▶ keys or the numerical keys on the remote control (for 2- or 3-digit track numbers, press the keys in rapid succession).

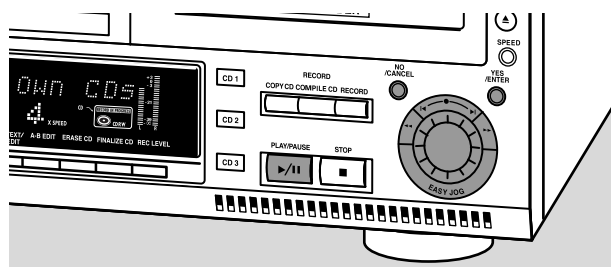
For tracks on another disc, first select the required disc by pressing CD 1, CD 2, CD 3 or CDR.

Searching during play

- 1 Hold down ◀◀ or ▶▶.
 - The set first searches backwards or forwards with sound at low volume, then speeds up with sound muted.
- 2 Release the button at the desired passage.
 - Normal playback continues.

Note: During playback of a MP3 track or Shuffle, Repeat Track or Programmed play, search is restricted to within the track being played at the time.

MP3 Disc navigation



Track selection is done differently during playback of MP3 CD's. Unless otherwise indicated operation of all other functions is the same for both MP3 CDs as well as for normal CD(RW)s.

Album selection and playback

- 1 Rotate the ◀ EASY JOG ▶ control to select the required album number; then release the control.
 - The display shows **ALBUM** together with the album number.
The album name is scrolled as soon as you release the ◀ EASY JOG ▶ control.
- 2 Press PLAY/PAUSE ▶/|| to start play from the selected album.

Track selection and playback

- 1 Select the required album and press YES.
- 2 Rotate the ◀ EASY JOG ▶ control to select the required track number; then release the control.
 - The display shows **TRACK** together with the track number.
 - The track name is scrolled as soon as you release the ◀ EASY JOG ▶ control.
- 3 Press PLAY/PAUSE ▶/|| to start play from the selected track.
 - If NO is pressed, the recorder returns to album selection mode.
 - During playback, press DISPLAY to display the album number; track number and track name.

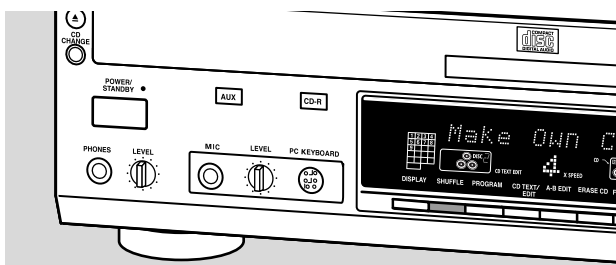
Notes:

At the end of your album selection you will recognize an album called **VARIOUS**. This album contains all tracks, which have not been saved in an album when making the MP3-CD.

If you wish to play a playlist, select it directly by rotating the ◀ EASY JOG ▶ control and then pressing PLAY/PAUSE ▶/||.

Playing

Shuffle and repeat



Playing tracks in random order (Shuffle)

- 1 Press SHUFFLE before or during play.
 - All tracks of loaded discs in both changer and recorder (**SHUFFLE ALL**) or the tracks in the program (**SHUFFLE PROGRAM**) are played in random order.
- 2 Press SHUFFLE again to return to normal play.

Repeating disc(s), a track or a program

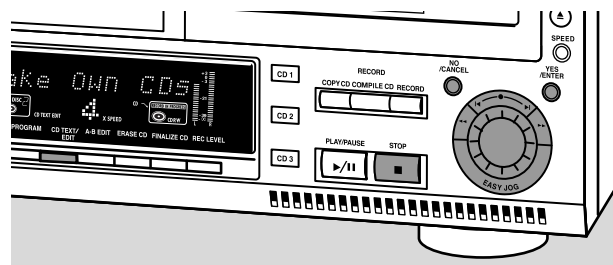
- 1 Press REPEAT on the remote control repeatedly during play to select:
 - **REPEAT TRACK**: the current track will be repeated;
 - **REPEAT DISC**: the current disc will be repeated;
 - **REPEAT ALL**: all discs in the set or all discs/tracks in the program will be repeated.
- 2 To return to normal play, press REPEAT on the remote control one or more times until:
 - The **REPEAT** label disappears from the display.

Notes:

REPEAT DISC is not possible during **SHUFFLE** or while playing a program or an MP3 disc.

REPEAT TRACK is not possible during **SHUFFLE**.

CDtext display



This feature allows to display information such as album title or track title contained on a specially encoded CD.

- Make sure to insert a CD with CD text.
 - **CD TEXT** is shown and the album title and album artist's name is scrolled once.

CD text when playback is stopped

- Press CD TEXT/edit to see the following information, which will be scrolled once (if available):

– **Album artist's name**
– **Album title**

CD text during playback

- Press CD TEXT/edit to see the following information, which will be scrolled once (if available):

– **Track artist's name**
– **Track title**

ID3-tag

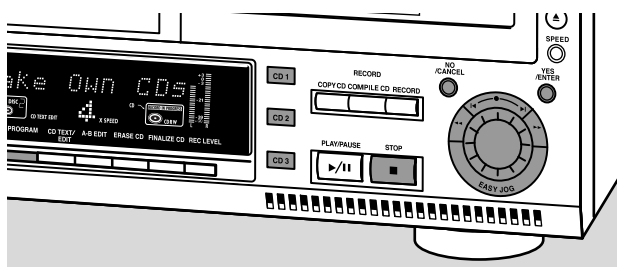
This feature allows the display of information such as album title or track title contained on an MP3-track.

- If you created an ID3-tag on your MP3-CD, press CD TEXT/edit during playback to display the following ID3-tag information:

– **Album title**
– **Track artist's name**
– **Track title**

Programming

Programming track numbers



- A program can be composed of normal audio tracks from multiple CDs in both changer and recorder deck.
- A program with MP3 tracks can only be composed of tracks from 1 CD.
- Any track can be stored more than once with a maximum of 99 tracks.
- If you exceed the maximum of 99 tracks the display shows **Program Full**.

- 1 Load the desired disc(s) in the disc tray(s).
- 2 Select the first required disc by pressing CD 1, CD 2, CD 3, or CDR.
- 3 Press PROGRAM.
→ **PROGRAM** starts blinking and **PROGRAM** is displayed.
- 4 Rotate the ◀ EASY JOG ▶ control to select the required tracknumbers on the selected disc and store each track by pressing YES.

For normal Audio CD(RW) discs only:

 - If you wish to store all tracks of the selected disc, rotate the ◀ EASY JOG ▶ control to select **All** and press YES to store the complete disc in the memory.
→ The number of programmed tracks (**STEP**), **Prog** and the total program time are displayed.
- 5 Select and store all required CD's and/or tracks in the same way.
- 7 Press PROGRAM to end programming.
→ **PROGRAM** stays shown and the program is currently available.

Changing a program

- 1 If necessary press STOP ■.
- 2 Press PROGRAM to enter Program mode.

Erasing tracks

- 3 Select the tracknumbers you wish to erase with ◀◀ or ▶▶ and erase each number by pressing NO.
 - **Cleared** is displayed briefly.
 - The next programmed track number will move up to this position and is displayed together with the step number and the total program time.

Adding tracks

- 3 Rotate the ◀ EASY JOG ▶ control to select the tracknumbers you wish to add to the program and store each track by pressing YES.
 - The number of programmed tracks (**STEP**), **Prog** and the total program time are displayed.
- 4 Press PROGRAM to end programming.
→ **PROGRAM** stays shown and the program is currently available.

Clearing a program

- 1 If necessary press STOP ■.
- 2 Press NO.
→ **Clear Prog ?** is displayed.
- 3 Press YES to clear the program.
→ **Prog Cleared** will be displayed and **PROGRAM** goes off.

Making a program for recording

If the program is used for recording only tracks from discs in the changer should be programmed. Also see chapter "Recording a program".

About recording

Basic information

We will describe:

- **Recording from internal CD changer**
- **Recording from an external source**
- **Finalizing CDR(W) discs:**

Finalizing a CDR(W) disc is a simple procedure, necessary to:

- play a recorded CDR on a standard CD player;
- play a recorded CDRW on a CDRW compatible CD player

- **Unfinalizing CDRWdiscs:**

Necessary to add new recordings to the disc or to erase the disc

- **Erasing from CDRWdiscs**

- The recording procedure is the same for CDR and CDRW discs. Make sure that the CDR(W) is absolutely free of scratches and dust particles.
- It is advisable to use a CDRW disc for your first try.
- For recordings, the minimum track length is 4 seconds. You can record up to a maximum of 99 tracks on a disc. The minimum of recording time left on the disc is 7 seconds. Else, **Disc Full** is displayed and you cannot enter into the record mode. If the length of the source material is longer than the remaining recording time on the CDR(W) **Does Not Fit** is displayed
- CDTEXT on the original CD is recorded automatically. When a track with copy protected text is encountered **Text Protect** will be displayed.

Copyright protection

The Serial Copy Management System (SCMS) prevents the making of a digital copy from a digital copy. The system allows making a digital recording from the original, however in some countries this may require the authorization of copyright holders.

When you try to record a copy protected material from an external source, **Copy Protect** will be displayed. No further digital recording is possible then.

When you try to record a copy protected material from the internal CD changer no digital recording is possible, however the CD recorder will automatically switch to analog recording. It is not possible to copy an MP3-CD.

Remarks on recording

- Recording can be stopped manually by pressing STOP ■ otherwise recording will stop automatically.
- During recording the elapsed recording time can be checked by pressing DISPLAY.

Direct Line Recording (DLR)

The CD recorder is equipped with the high-performance Direct Line Recording (DLR) technique. It ensures a perfect recording of the source material, meaning a true "bit for bit" recording. DLR will not be active, when ALC is used or when the record level is adjusted.

Auto Level Control (ALC)

Auto Level Control ensures that the tracks on the recorded disc have a similar volume level. Always the already recorded tracks of the CDR(W) disc will be taken as reference for the volume level of the following recordings.

Auto level control becomes automatically active, when:

- COMPILE CD is being used,
- a disc, a track or a track edit is being high speed recorded and the CDR(W) has recordings on it, or
- a program (consisting from more than one disc) from the CD changer is being high speed recorded.

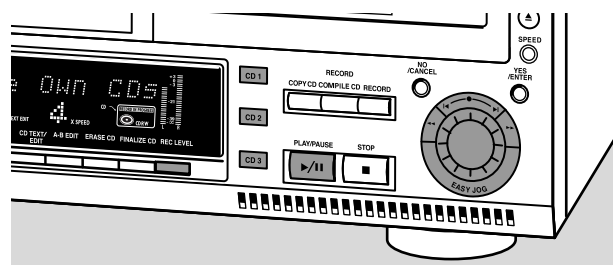
Auto level control will not become active, when:

- using COPY CD,
- making recordings from an external source, or
- making normal recordings in listen mode.

Switching ALC permanently off

- 1 If necessary press STOP ■ to stop playback.
- 2 Press CDR to select the CD recorder.
- 3 Press REC LEVEL to select:
 - **ALC Off** : ALC is permanently switched off.
- To enable ALC press REC LEVEL again to select:
 - **ALC On** : ALC is enabled.

Adjusting the record level



You can adjust the reference record level for both digital and analog recordings from the internal changer as well as from external sources. This is also possible when ALC is active. This feature can also be used for fading your recordings in or out.

- 1 Select the recording source with CD1, CD2 or CD3 for internal recording or with AUX for external recording.
- 2 Press REC LEVEL on the set to enable the ◀ EASY JOG ▶ control to adjust the record level.
- 3 Rotate the ◀ EASY JOG ▶ control to the left to adjust the desired record level.
 - The actual record level (in dB) will be displayed.

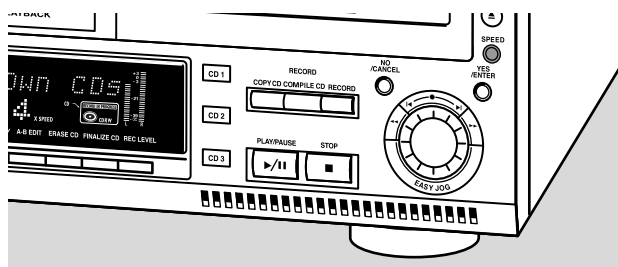
Notes:

The record level from the internal changer can only be adjusted during recording.

The loudest sounds on the source should not reach 0 dB maximum (first red level).

Internal recording

Selecting the recording speed



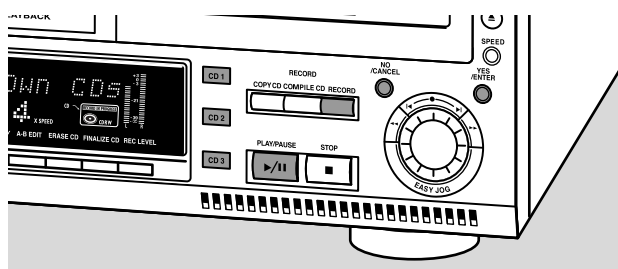
- 1 Press **SPEED** several times to select the required recording speed: 1x (normal speed), 2x (double speed) or 4x (4 times normal speed).

Notes:

If recording is not successful, you may need to select a lower speed.

The recording speed cannot be changed during recording.

Recording a single track

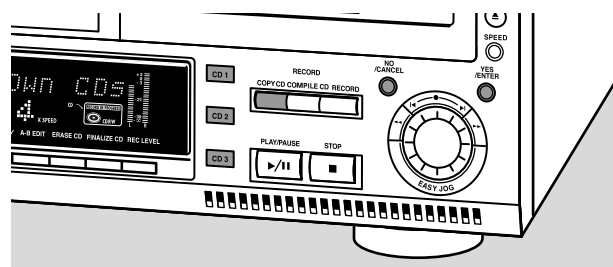


Recording a single track during playback

- 1 Make sure the CDR(W) is absolutely free of scratches and dust particles and insert it into the CD recorder tray.
- 2 Play your desired track on the CD changer.
- 3 Press **RECORD** on the set to enter the recording menu.
→ **Rec Tr** and the tracknumber are displayed.
- 4 Press either:
YES to start recording.
→ The arrow lights, **RECORD IN PROGRESS** is shown, playback and recording start from the beginning of the selected track and the actual recording time left starts to count down.
or
NO to continue playback.

Do not forget to finalize!

Recording an entire CD



High speed recording and automatic finalizing of the current disc

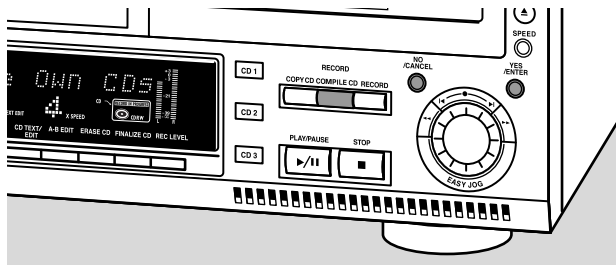
- 1 Make sure the CDR(W) is absolutely free of scratches and dust particles and insert it into the CD recorder tray.
- 2 Select the required disc by pressing **CD1**, **CD2** or **CD3**.
- 3 Press **COPY CD** to enter into the record mode.
→ The arrow and the **YES** key start blinking. The remaining recording time of the CDR(W), the total playing time of the source CD and **Record CD1** (or **2**, **3**) are displayed.
- 4 Press **YES** to start recording and finalizing.
→ The arrow lights, **RECORD IN PROGRESS** and **FINALIZE** are shown, high speed recording and finalizing start and the actual recording time left starts to count down.

Note: If a program was already available before pressing **COPY CD**, this will be ignored. **PROGRAM** goes off and the current disc will be recorded. After finishing the recording, **PROGRAM** is shown and the program is available again.

Do not forget to finalize!

Internal recording

Recording a program



High speed recording and automatic finalizing (optional) of the current program

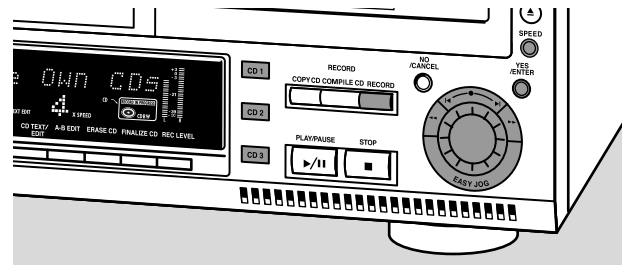
- 1 Make sure the CDR(W) is absolutely free of scratches and dust particles and insert it into the CD recorder tray.
- 2 Select and store all desired tracks in the CD changer memory (see "Programming track numbers").
- 3 Press COMPILER CD to enter into the record mode.
→ The arrow starts blinking. The remaining recording time of the CDR(W), the total playing time of the program and Rec Prog ? are displayed.

Note: If no program is available and you press COMPILER CD, you enter immediately into the program menu. Start programming and return to the record mode by pressing PROGRAM or COMPILER CD.

- 4 Press either:
NO to change the program.
→ program starts blinking. Now you can change the program (see "Programming") and return to the record mode by pressing COMPILER CD.
or
YES to confirm recording.
→ Auto Final ? is displayed.
- 5 Press either:
YES, if the CDR(W) is to be finalized after recording,
or
NO, if the CDR(W) is not to be finalized after recording.
→ The arrow lights, **RECORD IN PROGRESS** is shown, high speed recording and finalize (if selected) start and the actual recording time left starts to count down.

Do not forget to finalize!

Further recording possibilities



Recording of an entire disc, a track, a program or an A-B edit without automatic finalizing

- 1 Make sure the CDR(W) is absolutely free of scratches and dust particles and insert it into the CD recorder tray.
- 2 Select the required disc by pressing CD1, CD2 or CD3.
- 3 Press RECORD to enter the recording mode.
- 4 Rotate the ◀ EASY JOG ▶ control to select one of the following normal record options:

If CD changer is selected:

- Rec CD X ? : for recording an entire disc
 - Continue with step 5.
- Rec Track ? : for recording a single track
 - Press YES to confirm.
 - Rotate the ◀ EASY JOG ▶ control to select the required track.
 - Rec Tr NN ? is displayed.
 - Continue with step 6.

If a program is available:

- Rec Prog ? : for recording a program

If an A-B edit is available (see "A-B Editing"):

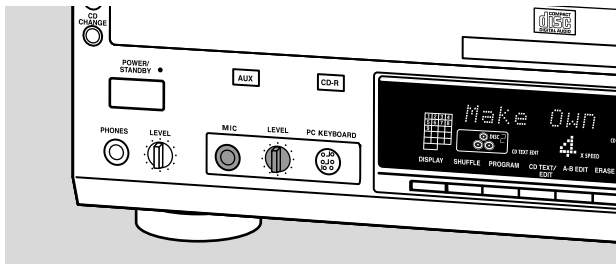
- Rec A-B ? : for recording an A-B track

- 5 Press SPEED several times to select the required recording speed: 1x (normal speed; for listening during recording), 2x (double speed) or 4x (4 times normal speed).
- 6 Press YES to confirm your selection.
→ The arrow starts blinking. The remaining recording time of the CDR(W), the total recording time of the CD, track or program and Record ? are displayed.
- 7 Press YES to start recording.
→ The arrow lights, **RECORD IN PROGRESS** is shown, normal speed recording starts and the actual recording time left starts to count down.

Do not forget to finalize!

Internal recording

Microphone recording



- 1 Make sure the CDR(W) is absolutely free of scratches and dust particles and insert it into the CD recorder tray.
 - 2 Set LEVEL to the minimum to prevent acoustic feedback (e.g. loud howling sound) before you connect the microphone.
 - 3 Connect a microphone to MIC.
 - 4 Select the required disc by pressing CD1, CD2 or CD3.
 - 5 Press RECORD to enter the recording mode.
 - 6 Rotate the ◀ EASY JOG ▶ control to select CD Mix Mic.
 - 7 Press YES to confirm.
→ Preparing, Rec and the tracknumber are displayed.
 - 8 Rotate the ◀ EASY JOG ▶ control to select the required track.
 - 9 Press YES to start playback and recording.
→ The selected track will be mixed to the microphone input.
→ The arrow lights, **RECORD IN PROGRESS** is shown, recording starts and the actual recording time left starts to count down.
- Note: It is not possible to mix and record with a copy protected track.*
- 10 Press STOP ■ to stop recording.
- The recording level for the microphone input can be set with LEVEL.
 - To perform microphone recording only see "Microphone recording" of chapter "External recording".

Note: The set is standard adjusted for a mono microphone. If you wish to use a stereo microphone, press AUX for more than 5 seconds. The set will display MONO ?. Press NO to select STEREO or YES to select MONO. Stereo Mic or Mono Mic will be displayed.

External recording

Analog or digital recording

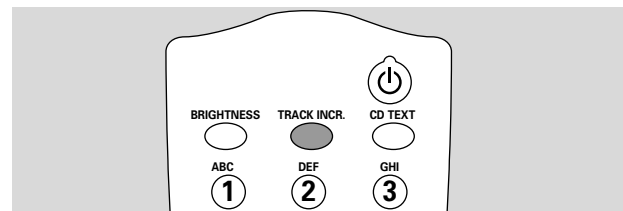
When making recordings from an external source, we recommend to do analog recording only if digital recording is not possible. Digital recording will usually result in better sound quality.

See chapter "Connections" to see which connections are required.

If a digital source is selected:

- In case no digital signal is received, the input label (**DIG** or **OPT**) starts flashing and No Signal is displayed.
- Press DISPLAY to display the input sample rate (SRC XX, X KHZ).
- Bit Perfect is displayed when an exact CD standard signal is received which can be recorded with Direct Line Recording.

Automatic track increment for analog sources



When digitally recording from a CD player/changer (internal or external) track increments are automatically taken over from the source. When recording from analog sources (AUX Analog), track increment is done, based on silences (pauses) in the source material. Select one of the following settings with the TRACK INCR(ement) key on the remote control:

- **CD/DVD**: when recording from CD, DAT, DCC or DVD;
 - **Tape/Tuner**: when recording from a cassette deck or tuner;
 - **Turntable**: when recording from a record player;
 - **Manual**: switches the function off;
- Default setting is Tape/Tuner.

Notes:

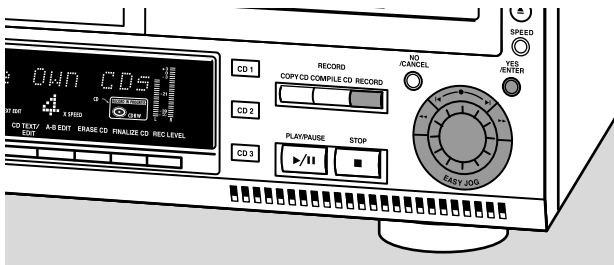
Auto track increment is dependant on the quality of the source material and therefore not always possible.

Track numbers can always be incremented manually by pressing TRACK INCR(ement) on the remote control during recording. The minimum track length is 4 seconds.

Track numbers cannot be changed after recording.

External recording

Recording with automatic start



Recording with automatic start from an external source

Note: External recording is only possible at normal speed (1x).

- 1 Make sure the CDR(W) is absolutely free of scratches and dust particles and insert it into the CD recorder tray.
- 2 Press AUX repeatedly to select the input for the external source you want to record from.
 - **AUX Digital** is displayed if the digital coaxial input (DIGITAL IN) is selected.
 - **AUX Optical** is displayed if the digital optical input (OPTICAL IN) is selected.
 - **AUX Analog** is displayed if the analog input (ANALOG IN) is selected.
- 3 Press RECORD on the set to enter into the recording menu.
- 4 Rotate the ◀ EASY JOG ▶ control to select either:
 - **AUX CD ?**: for recording with synchronised start of an entire disc.
 - **AUX Track ?**: for recording with synchronised start of a single track.
- 5 Press YES to confirm your selection.
 - **Press Play On External Source** is displayed.
- 6 Start playback on the external source you wish to record from.
 - Recording starts simultaneously. **RECORD IN PROGRESS** is shown and the actual recording time left starts to count down.

Note: If you start playback on the selected source within a track, recording starts at the beginning of the next track or after 2.7 seconds of silence for analog sources.

7 If a digital source is selected:

After the recording process, the CD recorder stops automatically.

Note: Recordings from DAT or DCC will automatically stop after 20 seconds silence.

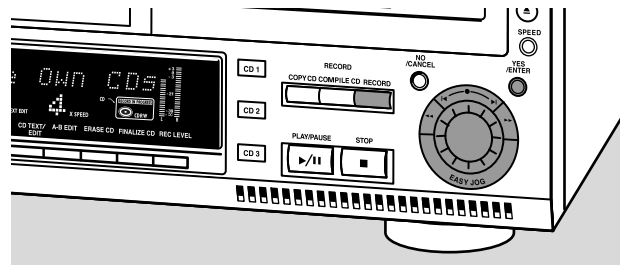
If an analog source is selected:

After the recording process, the CD recorder stops after a silence of 20 seconds on the source material.

- To stop manually, press STOP ■ on the set.
 - **RECORD IN PROGRESS** goes off.

Do not forget to finalize!

Manual recording



Manual recording from an external source

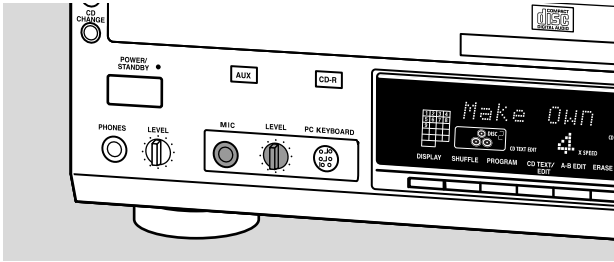
This feature enables you to manually start and stop a recording from any external source. You can use manual recording for recording live music, or for particular music like classical music which cannot be recorded with automatic start.

- 1 Make sure the CDR(W) is absolutely free of scratches and dust particles and insert it into the CD recorder tray.
- 2 Press AUX repeatedly to select the input for the external source you want to record from.
 - **AUX Digital** is displayed if the digital coaxial input (DIGITAL IN) is selected.
 - **AUX Optical** is displayed if the digital optical input (OPTICAL IN) is selected.
 - **AUX Analog** is displayed if the analog input (ANALOG IN) is selected.
- 3 Press RECORD on the set to enter the recording menu.
- 4 Rotate the ◀ EASY JOG ▶ control to select the record type.
 - **AUX Manual ?**: for manual start of recording
- 5 Press YES to confirm your selection.
 - **Preparing** is displayed.
 - **Record ?** is displayed, followed by **AUX** and the remaining recording time of the CDR(W). Both messages will be swapped continuously.
- 6 Start playback on the external source in order to set the optimal recording level on the CD recorder (see "Adjusting the Record Level").
- 7 Stop playback on the external source.
- 8 Go to the beginning of the desired track.
- 9 Press YES and simultaneously start playback on the external source.
 - Recording starts. **RECORD IN PROGRESS** is shown and the actual recording time left starts to count down.
- 10 To stop recording, press STOP ■ on the set.
 - **Update** is displayed and **RECORD IN PROGRESS** goes off.

Do not forget to finalize!

External recording

Microphone recording



- 1 Make sure the CDR(W) is absolutely free of scratches and dust particles and insert it into the CD recorder tray.
 - 2 Set LEVEL to the minimum to prevent acoustic feedback (e.g. loud howling sound) before you connect the microphone.
 - 3 Connect a microphone to MIC.
 - 4 Press AUX repeatedly to select the input for the external source you want to record from: AUX Digital, AUX Optical or AUX Analog.
 - 5 Press RECORD to enter the recording mode.
 - 6 Rotate the ◀ EASY JOG ▶ control to select:
 - AUX Mix Mic: sound input from both microphone and external will be recorded.
 - Mic Only: only sound input from microphone will be recorded.
 - 7 Press YES to confirm.
 - Wait is displayed.
 - Record ?, AUX and the remaining recording time of the CDR(W) are displayed.
 - 8 Set the optimal recording level on the CD recorder (see "Adjusting the recording level" of chapter "About recording").
- In addition you can also set the optimal recording level of the microphone by turning LEVEL.
- 9 **If AUX Mix Mic is selected:**
Press YES and simultaneously start playback on the external source.
 - Recording starts.
 - The arrow lights, **RECORD IN PROGRESS** is shown and the actual recording time left starts to count down.

If Mic Only is selected:

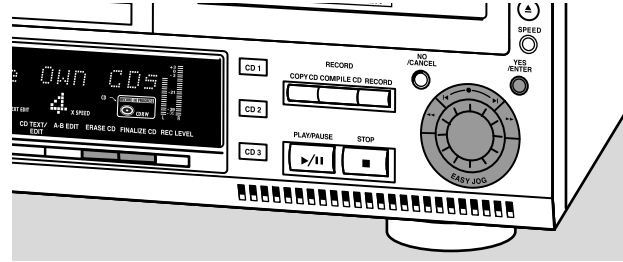
Press YES on the recorder:

- Recording starts.
- The arrow lights, **RECORD IN PROGRESS** is shown and the actual recording time left starts to count down.

Note: The set is standard adjusted for a mono microphone. If you wish to use a stereo microphone, press AUX for more than 5 seconds. The set will display Mono ?. Press NO to select STEREO or YES to select MONO. Stereo Mic or Mono Mic will be displayed.

(Un)finalizing, erasing

Finalizing CDR & CDRW discs



- Finalizing a CDR(W) disc is a simple procedure, necessary to:
- play a recorded CDR on a standard CD player;
 - play a recorded CDRW on a CDRW compatible CD player;
 - avoid further unwanted recordings on a disc;
 - avoid erasure of tracks on a CDRW.

Notes:

Finalizing will take about 1 minute.

*After finalization of the CDR(W), **CDR(W)** changes to **CD** on the display.*

During finalization no other operating commands can be executed.

After finalizing no more recording is possible on a CDR.

Auto finalizing

When you use either COPY CD or COMPILE CD, your recordings will be finalized automatically (see "High speed recording and automatic finalizing").

Manual finalizing when recording is in progress

- 1 Press FINALIZE CD on the set during recording.
 - Auto Final ? is displayed.
- 2 Press YES to confirm.
 - **FINALIZE** is shown. The finalization will start after recording and the actual finalizing time left will start to count down.

Manual finalizing when recording is stopped

- 1 Insert the CDR(W) you want to finalize in the CD recorder tray.
- 2 Press CDR to select the CD recorder.
- 3 Press FINALIZE CD on the set.
 - Finalize CD ? is displayed.
- 4 Press YES to start finalizing.
 - **FINALIZE** is shown, Final is displayed and the actual finalizing time left starts to count down.

(Un)finalizing, erasing

Unfinalizing CDRW discs

If you want to record (or erase) on (from) an finalized CDRW, you have to unfinalize it first.

Notes:

Unfinalizing will take approximately 1 minute.

*After unfinalizing of the CDRW, **CD** changes to **CDRW** on the display.*

- 1 Insert the CDRW you want to unfinalize in the CD recorder tray.
- 2 Press CDR to select the CD recorder.
- 3 Press FINALIZE on the set.
→ **Unfinalize** ? is displayed.
- 4 Press YES to start unfinalizing.
→ **Unfinal** is displayed and the operation time left starts to count down.

Note: When erasing more tracks, the tracks to be erased must be selected in sequence, starting from the last recorded track. Example: The CDRW has 5 tracks recorded on it. Now, you can erase track 5 and 4. You can also erase track 5, 4 and 3, however you cannot erase track 5 and 3!

Erasing from a CDRW disc

It is possible to erase one or more tracks (starting from the end of the last track) or the entire CDRW. Erasing is only possible on unfinalized CD-RW discs. If you try to erase a finalized CD-RW, the disc will be unfinalized first before it will be erased.

Erasing an entire CDRW

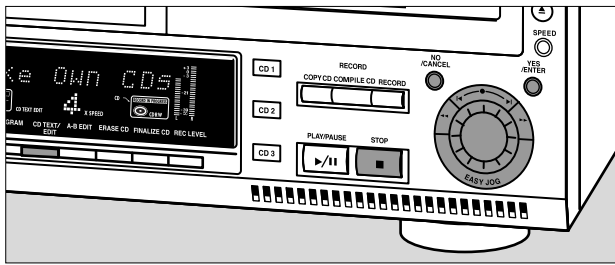
- 1 Insert the CDRW you want to erase in the CD recorder tray.
- 2 Press CDR to select the CD recorder.
- 3 Press ERASE CD to enter into the erasing menu.
→ **Erase Disc** lights up.
- 4 Press YES.
→ **Erase** ? lights up.
- 5 Press YES to start erasing.
→ **Erase** is displayed and the operation time left starts to count down.

Erasing one or more tracks

- 1 Insert the CDRW you want to erase in the CD recorder tray.
- 2 Press CDR to select the CD recorder.
- 3 Press ERASE CD to enter into the erasing menu.
→ **Erase Disc** lights up.
- 4 Rotate the **◀ EASY JOG ▶** control until the display shows:
→ **Erase Tr** and the track number (e.g. **10 +**) light up.
- 5 Rotate the **◀ EASY JOG ▶** control to select the track number(s) you wish to erase.
- 6 Press YES.
→ **Erase** ? lights up and the remaining disc time and the remaining number of tracks are shown on the display.
- 7 Press YES to start erasing.
→ **Erase** lights up and the operation time left starts to count down.

Special features

Text edit (on CD recorder only)



Storing text in STOP mode

After you have recorded your CDR(W) you can enter text, e.g. names for discs and tracks. The text will be displayed during playback on this set and other sets with the CD Text feature. You can enter up to 60 characters per text field. Only use an unfinalized CDR or CDRW (finalized CDRW must be unfinalized first).

- 1 If necessary press STOP ■.
- 2 Press CDR to select the CD recorder.
- 3 Press CD TEXT/edit to enter into the CD text edit menu.
→ **CD TEXT EDIT** is blinking and **CD Text Edit** is displayed.
- 4 Rotate the ◀ EASY JOG ▶ control to select either:
 - **Album Artist**: for editing the CD artist;
 - **Album Title**: for editing the CD title;
 - **Artist Tr 1** or (2, 3,...): for editing the artist of track 1 or (2, 3,...).
 - **Title Tr 1** or (2, 3,...): for editing the title of track 1 or (2, 3,...).
- 5 Press YES to confirm the selection.
→ The place where the first character can be entered is blinking.
- 6 Rotate the ◀ EASY JOG ▶ control to select a character. You can also select characters with the ◀ ▶ keys or the alphabet keys on the remote control.
→ After selecting a character, the cursor automatically moves to the next position.
- 7 Repeat step 6 for adding further characters.
- 8 Press YES to save the characters that have been selected and to exit to the last position in the text editing menu.
→ **Update** is displayed.

Auto copied text

When an artists name has been stored for a track, it will be copied automatically into the next track.

- Press either:
 - YES to confirm the copied text.
 - or
 - NO to delete the copied text and to enter a new one.

Inserting a space

- 1 Press ◀◀ or ▶▶ to move to the position where the space is to be inserted.
→ The position starts blinking.
 - 2 Press YES to confirm the position of the insert character.
→ A space will be inserted, text will move to the right.
- You can also use the SPACE button on the remote control to insert a space.

Deleting and substituting a character

- 1 Press ◀◀ or ▶▶ to move to the characters position to be deleted or substituted.
→ The character starts blinking.

If you want to delete the character:

- 2 Press NO.
→ The character is deleted and the text is shifted one position to the left.

If you want to substitute the character:

- 2 Rotate the ◀ EASY JOG ▶ control to select a new character.
- To change another character press ◀◀ or ▶▶.

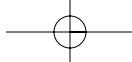
Erasing text

Text erasing is only possible when the CDR(W) is not finalized yet. A finalized CDRW needs to be unfinalized first.

- 1 Press CD TEXT/edit to enter into the text edit menu.
→ **CD TEXT EDIT** starts blinking and **CD Text Edit** is displayed.
- 2 Rotate the ◀ EASY JOG ▶ control to select the text erase menu.
→ **Erase Text** is displayed.
- 3 Press YES to confirm.
- 4 Rotate the ◀ EASY JOG ▶ control to select either:
 - **All Text CD**: all text of the selected will be erased in one step.
 - **All Text Tr NN**: all text of the selected track will be erased in one step.
 - **CD Title**: album title and album artist of the selected CD will be erased in one step.
- 5 Press YES to start erasing.

Erasing from the memory

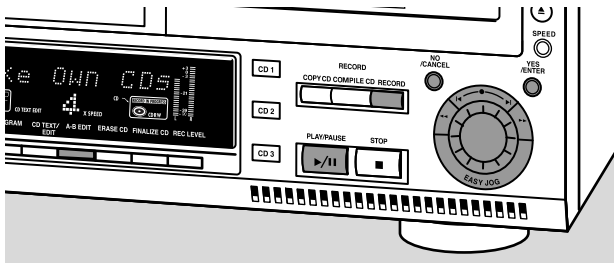
When the text memory of your CD recorder is full, the messages **Memory Full** and **Finalize Disc** will be displayed. If you still want to add a new disc to the text memory, you have either to erase another disc from the memory or you have to finalize another disc.



Special features

English

A-B editing (on CD changer only)



You can create a "track" by marking a passage of music within one track on the current disc. This new "track" can be used for recording or playing. The minimum track length is 4 seconds.

Note: You can only make an A-B edit for a normal Audio CD(RW).

- 1 Press A-B EDIT on the set.
→ **EDIT TRACK** starts blinking, **Track** and the current track number **?** are displayed.
- 2 Rotate the ◀ EASY JOG ▶ control until the desired track number is displayed.
- 3 Press YES to confirm the selected track.
→ From **A = XX : XX** and the track time will be displayed. The first 4 seconds of the track will be played continuously. The initial position of marker A is always the start of the chosen track.
 - To fast forward to the desired start position press ◀◀ or ▶▶ on the set.
 - To fine tune the position then rotate the ◀ EASY JOG ▶ control.
- 4 Press YES or A-B EDIT to confirm the position of marker a.
→ To **B = XX : XX** and the new "track" time will be displayed. The first 4 seconds before marker position B until marker position B will be played continuously. The initial position of marker B is always the position of marker A plus 4 seconds.
 - To fast forward to the desired stop position press ◀◀ or ▶▶ on the set.
 - To fine tune the position rotate the ◀ EASY JOG ▶ control.
- 6 Press YES or A-B EDIT to confirm the marked passage.
→ **EDIT TRACK** is shown, **A-B** and the track edit time are displayed.
→ The new "track" will be stored.
 - Press PLAY/PAUSE ▶/|| to play the "track".
 - Press RECORD to record the "track" (also see "Recording").

Note: A-B EDIT can also be pressed during play. The Track Edit procedure will then start from the position where A-B EDIT was pressed.

Clearing the A-B edit

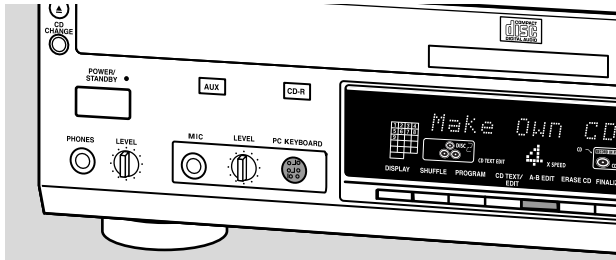
- 1 Press NO during stop.
→ **Clear A-B ?** is displayed.
- 2 Press YES to clear the markers.
→ The markers A-B are cleared.

Note: If you open the CD changer tray the A-B edit is deleted.



Special features

Operating the recorder via your PC keyboard



- Connect your PC keyboard to the recorder via the PC KEYBOARD jack on the recorder front.
 - You can now enter CD Text using your PC keyboard. In addition you can operate a number of recorder functions via the keyboard. The following keys are available for operating the recorder:

Pause	interrupts play
Enter	starts play/confirms a selection
Space	stops play
Tab	selects next menu item or track
Shift and Tab	selects previous menu item or track
Shift	selects capital characters when entering text
Down arrow	selects previous menu item or track
Up arrow	selects next menu item or track
Left arrow	searches backward
Right arrow	searches forward
ESC	cancels a selection
F1	selects CD1
F2	selects CD2
F3	selects CD3
F4	selects CDR
F5	selects analog input (AUX ANALOG)
F6	selects digital coaxial input (AUX DIGITAL)
F7	selects digital optical input (AUX OPTICAL)
F8	selects display information/text
F9	makes CD text scroll over display once
F10	opens Text Edit mode
Page up	selects previous track (5 tracks maximum)
Page down	selects next track (5 tracks maximum)
Home	goes to start of text string
End	goes to end of text string
Scroll Lock	opens A-B Edit mode
Ins	toggles the cursor behaviour from Insert to Overwrite next character (Text Edit only)

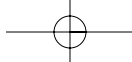
Del.....deletes next character (text edit only)

Backspace.....deletes previous character

Notes:

The keyboard LEDs do not function when the keyboard is connected to the recorder.

Special characters (accents, ß, ø, ä, etc.) are not supported



Troubleshooting

English

WARNING

Under no circumstances should you try to repair the set yourself as this will invalidate the guarantee.

Do not open the set as there is a risk of electric shock.

If a fault occurs, first check the points listed, before taking the set for repair. If you are unable to solve a problem by following these hints, consult your dealer or service center.

Laser safety

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

Problem

Solution

No power

- ensure that the ON/OFF button is on: the set is in standby mode, press any key to activate it
- ensure that the power cord is plugged in correctly

No sound

- check the audio connections
- try using a different source on the amplifier

Remote control does not work

- first select the right source on the remote control
- point the remote control directly at the set

Will not record

- clean the disc
- check if CDR(W) is an unfinalized disc
- check that the disc is recordable and replace if necessary
- the disc is not an AUDIO disc (WRONG DISC)

Recording is distorted

- make sure the recording level is correct

Recorded tracks do not start or stop at the correct time or tracks have been merged together

- try another auto track setting
- check if there are at least 2.7 seconds silence in between the tracks (analog recording only)
- insert track increments manually with the remote control

20 second pause between recordings

- see "Recording with automatic start".

Recorded disc does not play in other standard CD player

- finalize the CDR(W)
- insert the CDRW in a CDRW compatible player

Stops during recording

- use Philips audio CDR(W)s.
- in case recording process is interrupted (power loss, mechanical shock), start recording again with a new disc

Missing directories on MP3-CD Insert Disc indication

- only albums with playable files will be shown
- replace or clean the disc
- insert a CD(RW), label upwards
- wait until the lens has cleared

Use Audio CD indication

- insert a digital audio disc marked with "Digital audio" and the special logo

Check Input indication

- select the correct input
- make sure the digital source is switched on
- make sure the connection cord is properly connected

Unexpected start of Demo mode (automatic display of recorder features)

- keep STOP ■ on the set pressed for at least 5 seconds to cancel Demo mode permanently

Set does not react

- unplug the set, then replug it



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