

PHILIPS

FW 780P Dolby Pro Logic CD Mini HiFi System



Instructions for use
Mode d'emploi
Instrucciones de manejo
使用説明書
使用说明书



PHILIPS

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.

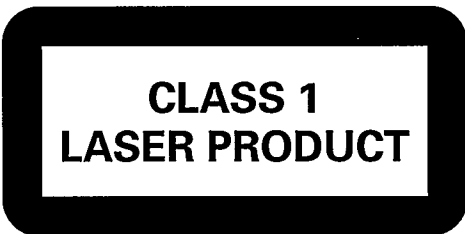
Any defect in materials or workmanship occurring within the specified period from the date of delivery, will be rectified free of charge by the retailer from whom this product was purchased.

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. The document you are now reading is your guarantee card.

Guarantee

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, and this guarantee card completed at time of purchase (this is your proof of 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.**

✉ P.O. Box 41.021

Auckland

☎ (09) 84 94 160

fax ☎ (09) 84 97 858

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GARANTIA PARA MEXICO

NOM

Este aparato está fabricado con materiales de alta calidad y ha sido cuidadosamente verificado. Philips, por lo tanto, da a usted una garantía de 12 meses a partir de su fecha de compra.

La garantía ampara la reposición de las piezas defectuosas debidas a fallas en su montaje o en los materiales, incluyendo la mano de obra necesaria para su reemplazo en nuestras Sucursales o talleres autorizados.

En caso de fallas en su aparato le rogamos se sirva poner en contacto con su distribuidor.

Esta garantía no cubrirá las averías que resulten como consecuencia de una instalación incorrecta del aparato, manifiesto maltrato o uso inadecuado del mismo.

Philips se obliga a reparar y devolver a usted su aparato en un plazo no mayor de 30 días hábiles contados a partir de la fecha de haber ingresado su aparato a uno de nuestros talleres.

Para que esta garantía sea válida, es necesario que el certificado que figura en la parte posterior de este instructivo haya sido debidamente llenado en el momento de la compra del aparato.

En caso de extravío del certificado con la presentación de la factura o remisión de su aparato podrá hacer efectiva la garantía correspondiente.

Si usted tiene alguna duda o pregunta que no le pueda solucionar su distribuidor, por favor ponerse en contacto con

**Oficinas Centrales de Servicio,
Av. Coyoacán No. 1051,**

**Col. del Valle,
03100 MÉXICO, D.F.**

☎ 5-75-20-22 o 5-75-01-00

NOM

Mexico

Es necesario que lea cuidadosamente su instructivo de manejo.



NOM

Thank you ...


Thank you for buying the new Philips Dolby Pro Logic CD Changer mini hifi system. We have designed and tested the mini system to the highest standards that will provide you with the latest technology and high quality sound for your enjoyment. If you follow this operating instructions, you will quickly learn how to adjust and operate all the functions of your new mini system. Please read and perform the instructions in the sequence shown.

General Information

- The typeplate is located at the rear of the set.
 - Recording is permissible if copyright or other rights of third parties are not infringed.
- 1 All unnecessary packaging material has been omitted. We have done our utmost to make the packaging easy to separate into three mono-materials:
 - cardboard (box)
 - expandable polystyrene (buffer)
 - polythene (bags, protective foam sheet).
 Please observe the local regulations regarding the disposal of these packaging materials.
 - 2 Your set consists of materials which can be recycled and reused if disassembled by a specialized company. Please follow local regulations on recycling your old set.
 - 3 Do not dispose exhausted batteries with your household waste. Dispose batteries according to local regulations.
 - 4 Note: Switching off the standby mode overnight (remove the AC power cord from the wall socket) will save energy.

Acknowledgement



"Dolby" "Pro-Logic" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation. Manufactured under license from Dolby Laboratories Licensing Corporation.

Accessories (Supplied)

- Remote control transmitter
- Batteries (2 x AAA size) for remote control transmitter
- AM loop antenna
- FM antenna wire
- AC power cord

Accessories (Recommended)

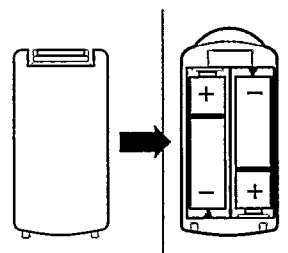
- Philips FB 203 Surround package (includes 2 x surround rear speakers and 1 x center speaker).
- Model FB 206W wireless surround speaker package (includes 2 x wireless surround rear speakers and 1 x center speaker and a transmitter unit).
- Philips FB 201 active subwoofer.
- Philips FB 202W wireless active subwoofer

Safety Information

- Before operating the system, check that the operating voltage indicated on the typeplate (or the voltage indication beside the voltage selector) of your system is identical with the voltage of your local power supply. If not, please consult your dealer. The type plate is located at the rear of your system.
- When the system is switched on, do not move it around.
- Place the system on a solid base (e.g. a cabinet).
- Place the system in a location with adequate ventilation to prevent internal heat build-up in your system.
- Do not expose the system to excessive moisture, rain, sand or heat sources.
- Under no circumstances should you repair the unit yourself, as this will invalidate the warranty!
- If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens of the CD unit inside the system. Should this occur, the CD player will not operate normally. Leave the power on for about one hour with no disc in the unit until normal playback is possible.
- Electrostatic discharge may cause unexpected problems. See whether these problems disappear if you unplug the AC power cord and plug it in again after a few seconds.
- **To disconnect the system from the power supply completely, remove the AC power plug from the wall socket.**

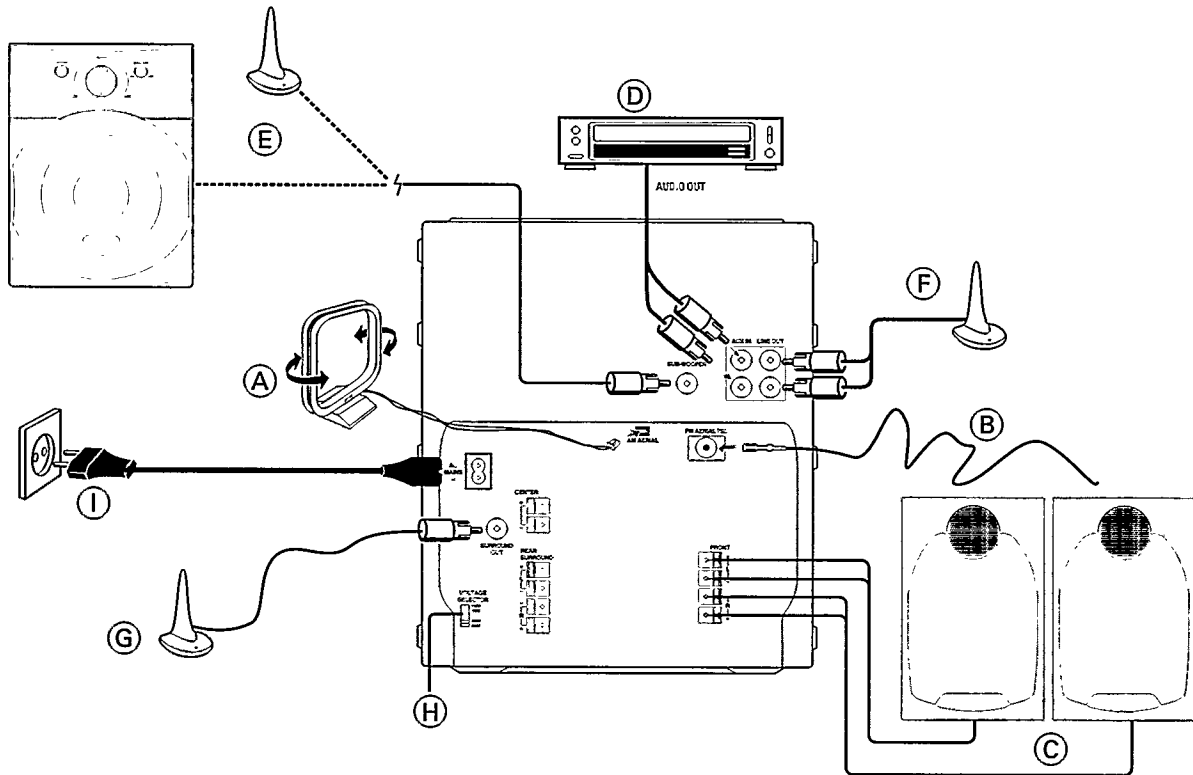
Inserting the batteries into the Remote Control

- Insert the batteries (Type R03 or AAA) into the remote control transmitter as shown in the battery compartment.



- To avoid damage from possible battery leakage, remove exhausted batteries or batteries that will not be used for a long time. For replacement use type R03 or AAA batteries.

Rear Connection



(A) AM Antenna Connection

Connect the supplied loop antenna to the AM AERIAL terminal. Adjust the position of the AM loop antenna for the best reception.

(B) FM Wire Antenna Connection

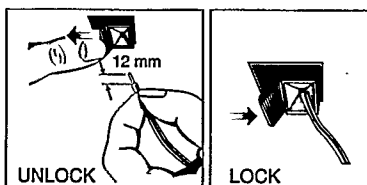
Connect the supplied FM wire antenna to the FM 75Ω terminal. Adjust the position of the FM antenna for the best reception.

Outdoor Antenna

For better FM stereo reception connect an outdoor FM antenna to the FM AERIAL 75 Ω terminal using a 75 Ω coaxial wire.

(C) Speaker Connections (2-speakers system)

- Connect the right speaker to Front terminal **R**, with the red wire to **+** and the black wire to **-**.
- Connect the left speaker to Front terminal **L**, with the red wire to **+** and the black wire to **-**.
- Clip the stripped portion of the speaker wire as shown.



For Dolby Pro Logic Connection, see next page.

(D) Connecting other equipment to your system

You can connect TV, Laser Disc player, VCR or DVD (Digital Video Disc) audio left and right outputs to the AUX IN terminal at the rear of the system.

(E) Subwoofer Out (optional)

See page 6, under Subwoofer Out.

(F) Line Out (ready)

See page 6, under Line Out for remote speakers.

(G) Wireless Surround Out (optional)

See page 6, under Wireless Surround Out for remote speakers.

(H) Adjusting the Operating Voltage

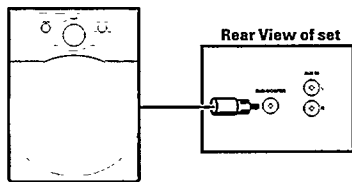
(For specific versions only)

Before connecting the AC power cord to a wall outlet, make sure that the voltage selector at the rear of the system is set to the local power line voltage. If not, reset the selector before connecting to the wall outlet.

(I) AC Power Supply

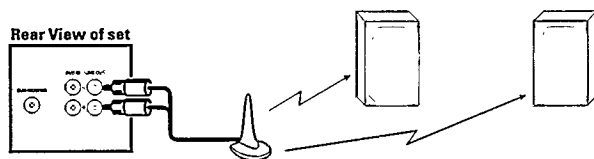
After all other connections have been made, connect the AC power socket to the set and the AC power plug to the wall outlet.

Subwoofer Out (optional)



You can connect either an external active subwoofer (recommended Philips FB 201) or an external wireless active subwoofer (recommended Philips FB 202W) to the SUBWOOFER OUT socket. For the wireless system it uses a radio frequency transmitter. The subwoofer is dedicated to reproducing just the low bass effect (e.g. explosions, the rumble of the spaceships, etc.). Be sure to follow the instructions supplied with the subwoofer unit.

Line Out for remote active speakers (Ready)



There is a possibility of locating additional front active speakers away from the system (e.g. in another room). It reduces the inconvenience of running long speaker wires across rooms. You can place as many remote speakers as you like provided that they operate at the same radio frequency. Connect the wireless radio frequency transmitter to the LINE OUT sockets. Place the active speakers at your preferred location. Be sure to follow the instructions supplied with the active speakers.

Wireless Surround Out (optional)

You may connect transmitter unit of the wireless rear speakers (recommended Model FB 206W) to the SURROUND OUT socket instead of the wired rear speakers. Be sure to follow the instructions supplied with the wireless rear speakers.

Demo mode

The system has a demonstration mode that shows the various features offered by the system. Whenever the system is switched on from the wall socket, the demonstration mode will start automatically.

To stop demonstration mode

- Press **DEMO, STANDBY - ON, CD, TUNER, TAPE 1-2, VIDEO/DVD, CD OPEN•CLOSE** or **3 CD DIRECT PLAY** button on the system (or **CD, TUNER, TAPE 1/2** or **AUX/TV** on remote control) to stop the demonstration mode.

To switch on demonstration mode

- Press **DEMO**.
→ The display will show "DEMO", then a demonstration of the various features will follow.

Dolby Pro Logic

This state of the art Dolby Pro Logic mini system enables you to experience and enjoy a Home Cinema sound ambience. The Pro Logic system allows more accurate defined individual sound sources. It produces greater sound separation between channels and provides pinpoint sound localisation. Pro Logic provides four outputs which are called Left, Center, Right and Surround (Rear). Front signals are produced from the Left and Right pair of speakers and a Center speaker. The surround signal is reproduced by two speakers placed towards the rear of the listening area. Although the surround signal is mono, a pair of speakers is necessary to produce the correct diffused sound field.

This Pro Logic decoder enables you to decode the following mode: **Dolby Pro Logic Center Normal, Dolby Pro Logic Center Phantom, Dolby 3 Stereo** or **Stereo**.

Setting up the Dolby Pro Logic system

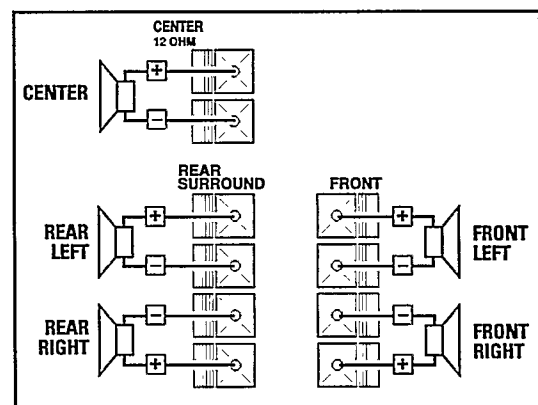
You need to do a pre set up in order for you to enjoy the Home Cinema sound to the fullest. First you need to do a complete speakers' connection.

5-Speakers Connection

Please note that the Center and Rear speakers are not included with this mini system. We recommend you to purchase the optional surround package FB 203 or FB 206W which includes the center and two rear speakers.

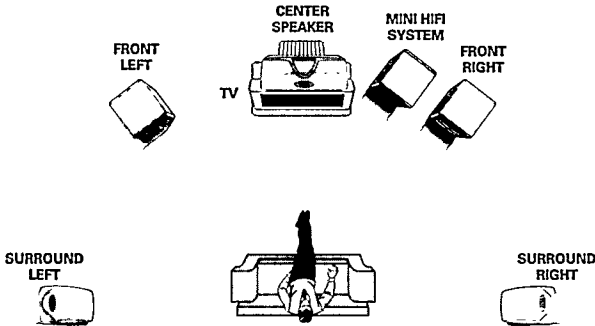
- Front speakers**: Connect the black wires to the black FRONT terminals and the red wires to the red FRONT terminals.
- Center speaker**: Connect the black or non-marked wires to the black CENTER terminal and the blue or marked wires to the blue CENTER terminal.
- Rear (surround) speakers**: Connect the black or non-marked wires to the black REAR terminals and the white or marked wires to the grey REAR terminals.

You may also connect a pair of wireless rear speakers (not supplied) from the SURROUND OUT terminals.



Positioning the Speakers

To get the best surround sound effect, place the speakers as follow.



Front Left and Right Speakers

For best listening effect, it is recommended to have the Left and Right speakers to form an angle of approximately 45 degrees to the listener. The speakers are magnetic shielded. Should the magnetic field from the speakers affect the picture of the television, you should increase the separation distance.

Center Speaker

For best directional effect, try to have the center speaker at the same height as the left and right speakers and as close as possible to the screen. Place it directly above or beneath the television set. If you use speaker from other make ensure that it is magnetically shielded.

Surround (Rear) Speakers

The surround speaker should be placed at normal listening ear level. It can also be mounted on the wall at the back of the room. Most important, sometimes you need to experiment creatively when placing the surround speakers in order to obtain the most ideal sound projection.

Test Tone

This feature enables you to adjust the Front Left, Front Right, Center and Surround sound level of the respective speakers in Dolby Pro Logic mode.

You must sit at the ideal sitting position to perform this operation.

- 1 Press **CD**, **TUNER** or **TAPE 1/2** or **AUX/TV** on the remote control to switch on the set.
- 2 Press **TEST TONE** on the remote control.
 - A test signal is generated and moves through the Left, Center, Right and Surround speakers respectively.
 - The test signal will last for about 90 seconds.
- 3 Press the **BALANCE L** to adjust the Front Left level setting.
 - The display will show the sound level and **BFL L**.
- 4 Press the **BALANCE R** to adjust the Front Right level setting.
 - The display will show the sound level and **BFL R**.
- 5 Press the **CENTER +/-** to adjust the center level setting.
 - The display will shows either **CENT +** or **CENT -**.

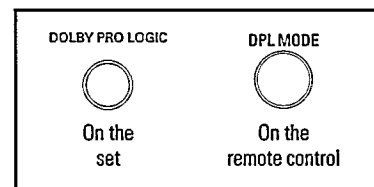
- 6 Press the **REAR +/-** to adjust the surround level setting.
 - The display will shows either **REAR +** or **REAR -**.
- 7 Adjust the sound level of all the speakers until they are of the same apparent loudness. When you are satisfied with the setting, press **TEST TONE** again to switch off the test tone.

Note:

It is advisable to set the speakers' level at normal listening volume level.

When you have completed the Dolby Pro Logic setup, you are ready to experience and enjoy a Home Cinema sound ambience.

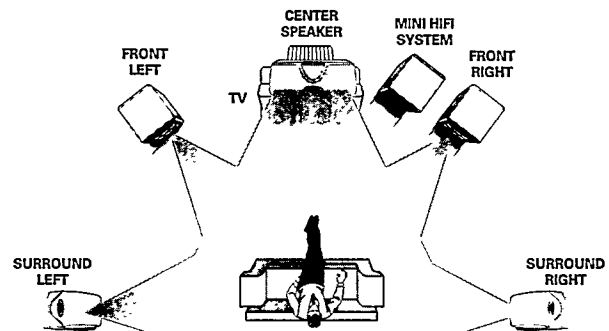
Press **DOLBY PRO LOGIC** (or **DPL MODE** on the remote control) repeatedly to select and cycle through the various sound mode.



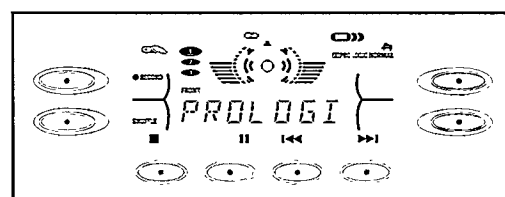
Dolby Pro Logic Center Normal → **Dolby Pro Logic Center Phantom** → **Dolby 3 Stereo** → **Stereo** → **Dolby Pro Logic Center Normal ...**

Dolby Pro Logic Center Normal

This setting is for a full Dolby Surround Pro Logic mode.



- Press **DOLBY PRO LOGIC** (or **DPL MODE** on the remote control) to select the Dolby Pro Logic Center Normal mode.
 - The display message "PROLOGIC CENTER NORMAL" will scroll across the display.
 - The display will be as follows:

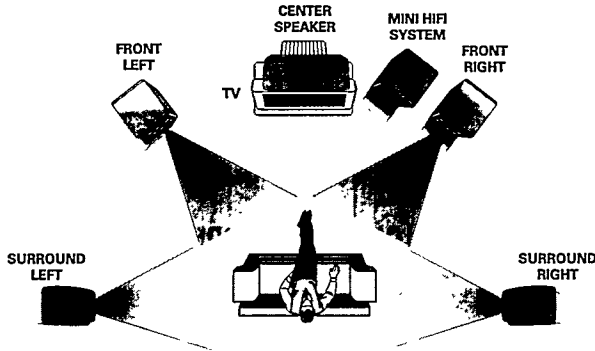


Dolby Pro Logic

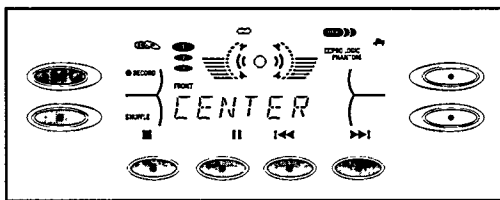
English

Dolby Pro Logic Center Phantom

This setting is for use without the center speaker. It redistributes the center channel information to the left and right speakers providing conventional stereo across the front.

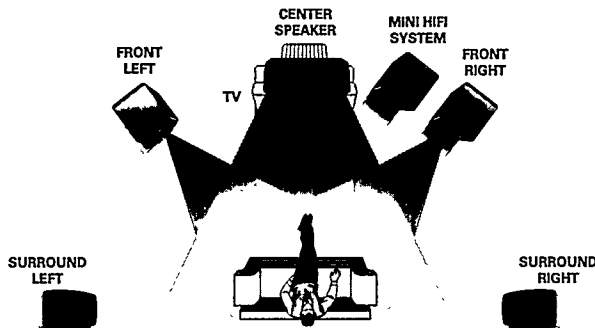


- Press **DOLBY PRO LOGIC** (or **DPL MODE** on the remote control) to select the Dolby Pro Logic Center Phantom mode.
 - The display message "CENTER PHANTOM" will scroll across the display.
 - The display will be as follows:

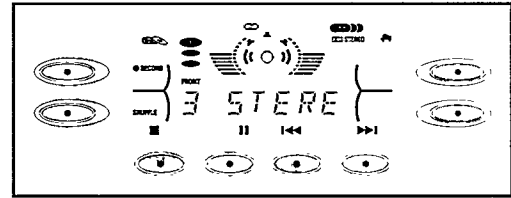


Dolby 3 Stereo

This setting is for use where full surround is not required, but a wide stereo sound is desirable. It only requires the left, right and center speakers.

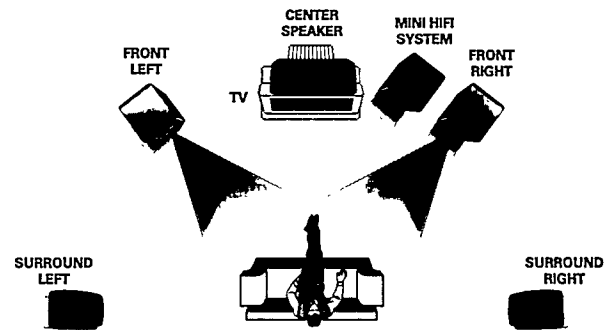


- Press **DOLBY PRO LOGIC** (or **DPL MODE** on the remote control) to select the Dolby 3 Stereo mode.
 - The display message "3 STEREO" will scroll across the display.
 - The display will be as follows:

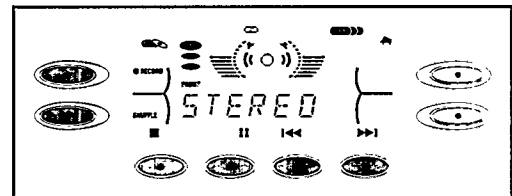


Normal Stereo

This setting is for normal stereo sound without Dolby Pro Logic. It only requires the left and right speakers.



- Press **DOLBY PRO LOGIC** (or **DPL MODE** on the remote control) to select the Stereo mode.
 - The display message "STEREO" will scroll across the display.
 - The display will be as follows:



Important!

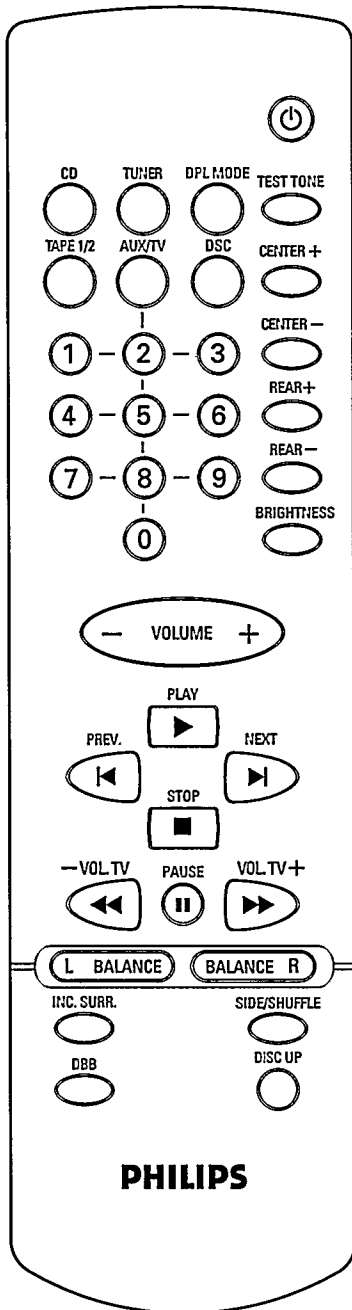
1. To listen the ideal and optimum Dolby Pro Logic sound setting, it is recommended to switch on DPL in combination with "Classic sound" and without Incredible Surround.
2. Dolby Pro Logic mode will automatically switch to normal Stereo mode when Vocal Fader is activated or when a headphones is connected.
3. It is recommended to switch to normal stereo mode when you do recording on a cassette.

Remote Control Functions

- First select the source you wish to control by pressing one of the source select keys on the remote control (e.g. TUNER, TAPE 1/2, CD or AUX/TV).
- Then select the desired function (PLAY, NEXT, etc.).

Notes:

- Whenever a remote control button is pressed, the source icon on the set display will flicker. This indicates the remote control signal is received by the set.
- For TV/VCR operation, the TV or VCR must use the RC-5 code remote control system.

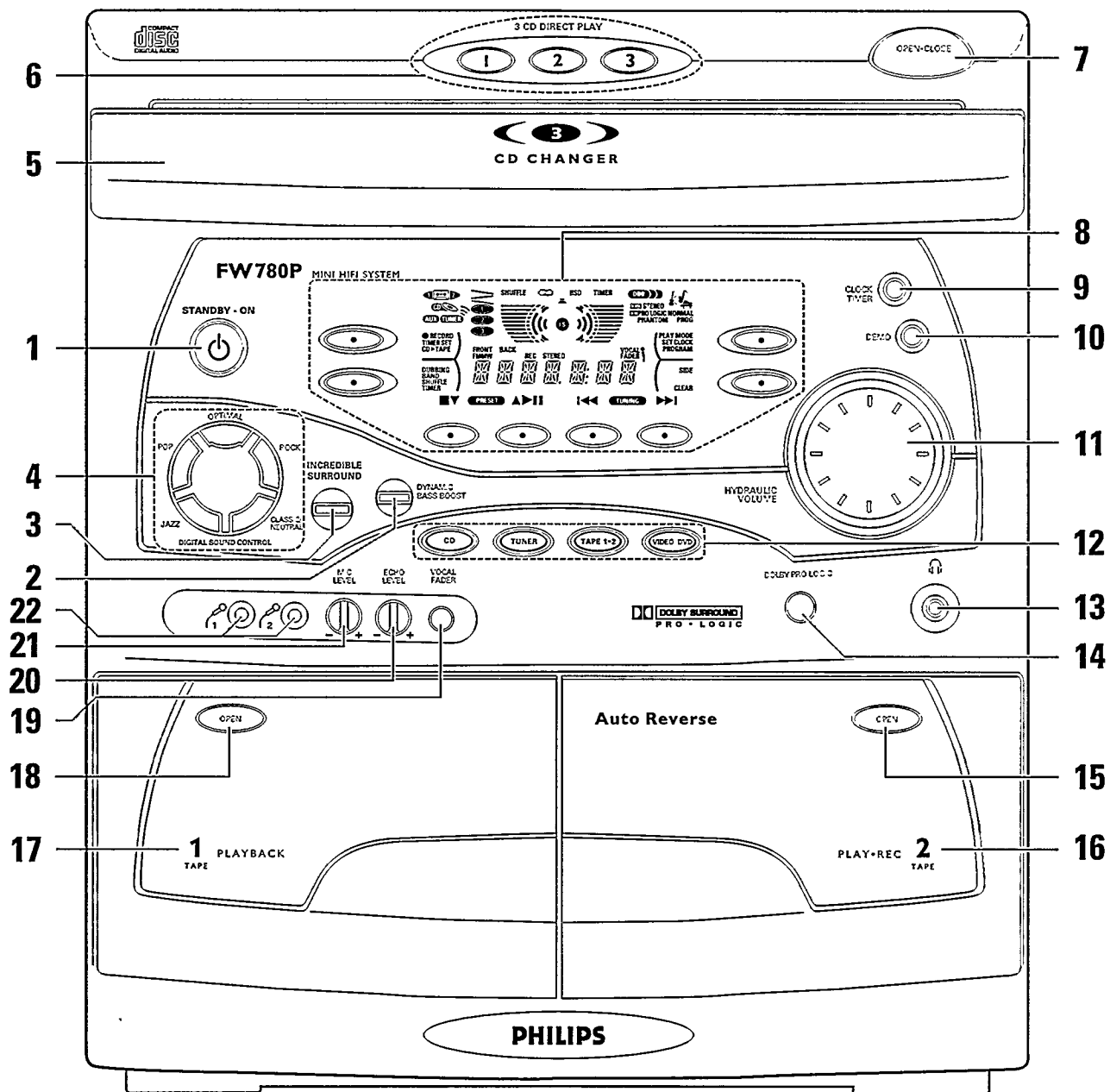



- ⏻ to switch the unit to standby mode.
- CD** to select CD mode.
- TUNER** to select TUNER mode.
- TAPE 1/2** to select TAPE 1 or 2 mode.
- AUX/TV** to select external or TV mode.
- Digit 0 - 9** *(numbers consisting of two figures must be keyed in within 2 seconds.)*
 - for TV/VCR only to key in a TV channel.
- DSC** to select digital sound control: JAZZ, POP, CLASSIC, ROCK or OPTIMAL.
- DPL MODE** to select Dolby Pro Logic Center Normal, Dolby Pro Logic Center Phantom or Dolby 3 stereo mode.
- TEST TONE** to check the sound level for Front Left, Front Right, Center and Surround speakers respectively.
- CENTER +/-** to adjust the sound level of the center speaker.
- REAR +/-** to adjust the sound level of the surround speakers.
- BRIGHTNESS** to select the brightness level of display screen.
- VOLUME +/-** to adjust the volume of the system.
- PLAY ▶** to start playback in CD, TAPE or VCR mode.
- STOP ■** to stop playback in CD, TAPE or VCR mode.
- ◀ PREV./NEXT ▶**
 - for TUNER to select a lower/higher tuner preset station.
 - for CD to select previous/next CD track.
 - for TV/VCR to select previous/next channel.
- PAUSE ■■** to interrupt play in CD, TAPE or VCR mode.
- TV VOLUME +/-** to adjust the TV (RC 5 code) volume.
- ◀◀ / ▶▶**
 - for TUNER to select a lower/higher frequency.
 - for CD to search a particular passage.
 - for TAPE to fast rewind/forward the tape.
- BALANCE L/R** to balance the sound level of the Front Left and Right speakers.
- INC. Surr.** to switch on or off the surround sound effect.
- DBB** to switch on or off dynamic bass boost.
- SIDE/SHUFFLE** to select the direction of play for TAPE DECK 2 or to play CD tracks at random.
- DISC UP** to select the next disc tray for playback.

Controls

English

Front View



- 1 STANDBY - ON**
 - to switch the set on or to standby mode.
- 2 DYNAMIC BASS BOOST (DBB)**
 - to switch on bass boost to enhance bass response or to switch off bass boost.
- 3 INCREDIBLE SURROUND**
 - to switch on or off the surround sound effect.
- 4 DIGITAL SOUND CONTROL (DSC)**
 - to select the desired sound effect : JAZZ, POP, CLASSIC, ROCK or OPTIMAL.
- 5 CD CAROUSEL TRAY**
- 6 3 CD DIRECT PLAY**
 - to select play for each CD in the tray.
- 7 OPEN•CLOSE**
 - to open or close the CD carousel tray.
- 8 MAGIC MENU USER INTERFACE AND DISPLAY**
 - to select the respective control functions for Tuner, CD, Tape and Video/DVD.
- 9 CLOCK•TIMER**
 - to set clock or timer.
- 10 DEMO**
 - to display the various features offered by the system.
- 11 HYDRAULIC VOLUME**
 - to adjust the volume level.
- 12 SOURCE SELECTION**
 - to select the following:
 - CD** : to switch to CD mode.
 - TUNER** : to switch to Tuner mode.
 - TAPE 1-2** : to switch to Tape 1 or 2 mode.
 - VIDEO/DVD** : to switch to external sources (e.g. DVD, TV, Laser Disc or VCR sound).
- 13 HEADPHONES** 
 - to connect headphones (3.5 mm) jack.
- 14 DOLBY PRO LOGIC**
 - to select Dolby Pro Logic Center Normal, Dolby Pro Logic Center Phantom, Dolby 3 Stereo or Stereo mode.
- 15 OPEN**
 - to open TAPE DECK 2 cassette compartment.
- 16 TAPE DECK 2**
- 17 TAPE DECK 1**
- 18 OPEN**
 - to open TAPE DECK 1 cassette compartment.
- 19 VOCAL FADER**
 - to fade out the vocal of the original song
- 20 ECHO LEVEL**
 - to adjust the echo level for karaoke or microphone recording.
- 21 MIC LEVEL**
 - to adjust the mixing level for karaoke or microphone recording.
- 22 MIC 1 and 2**
 - to connect microphones (3.5 mm) jack.

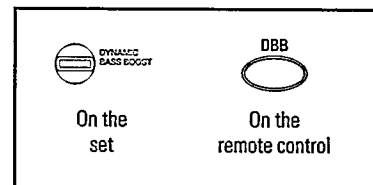
Hydraulic Volume Control

This system incorporates the latest feature of an interactive volume control. There is a special sensor that detects any object that comes within 30 cm from the system.

- When object is detected
 - The volume knob will protrude automatically.
 - The message "TOUCH ME" will scroll across the display.
- When object is not detected, after 10 seconds
 - The volume knob retracts.
 - The message "GOODBYE" is displayed.

Note:

During normal operation, the message will not be displayed. Only the volume knob will protrude or retract automatically.



To lock the volume knob (only in active mode)

- Press the **DBB** button on the set or remote control for more than 3 seconds.
 - The volume knob is locked and the message "VOLUME KNOB LOCKED" will scroll across the display.
 - The volume knob position will be at the last setting.
 - When the volume knob is locked, the sensor will be inactive.


To unlock the volume knob

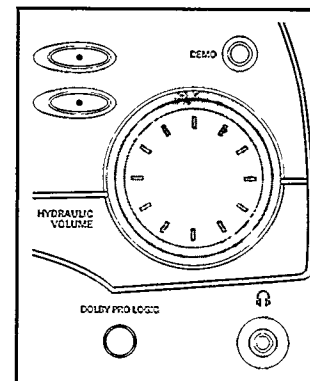
- Press the **DBB** button on the set or remote control for more than 3 seconds.
 - The volume knob is unlocked and the message "VOLUME KNOB UNLOCKED" will scroll across the display.

Volume Adjustment

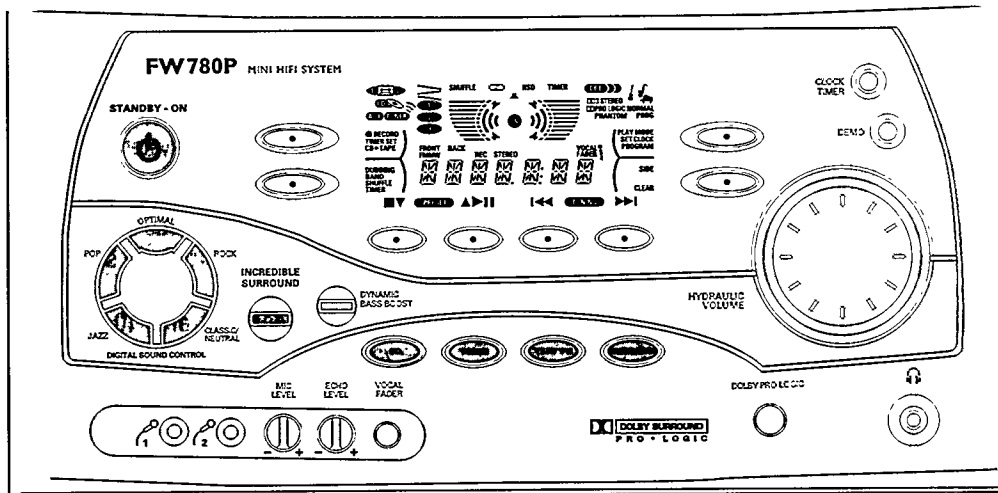
Rotate **VOLUME** right or left (or press **VOLUME +** or **-** on the remote control) to increase or decrease the sound level.

For Personal Listening

Connect the headphones jack to the  socket (3.5 mm) at the front of the set. The speakers will be muted.



Operating the System



Important:

Before you begin operating the system, complete the preparation procedures.

Switching the system ON

- Press **STANDBY-ON**, **CD**, **TUNER**, **TAPE 1-2** or **VIDEO/DVD** (or **CD**, **TUNER**, **TAPE 1/2** or **AUX/TV** on the remote control).

You can also switch on the system by pressing the **OPEN-CLOSE** or any one of the **3 CD DIRECT PLAY** button.

Switching the system to standby mode

- Press **STANDBY-ON** again (or **⏻** on the remote control).

Selecting the Sound Source

- Press the respective source selection: **CD**, **TUNER**, **TAPE 1-2** or **VIDEO/DVD** (or **CD**, **TUNER**, **TAPE 1/2** or **AUX/TV** on the remote control).
→ The display indicates the selected sound source.

Note:

For external source, ensure that you had connected the audio left and right outputs of the external equipment (TV, VCR, Laser Disc player or DVD) to the **AUX IN** sockets.

Digital Sound Control (DSC)

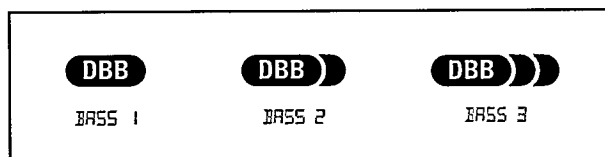
The DSC feature creates a realistic atmosphere for the style of music you select using the latest digital sound technology.

- To enjoy a special sound effect, press **JAZZ** (🎷), **POP** (🎸), **CLASSIC** (🎻), **ROCK** (🎸) or **OPTIMAL**.
- You can also press **DSC** on the remote control to select the respective sound setting.

Dynamic Bass Boost (DBB)

There are 3 settings for the DBB mode to enhance the bass response. You can press **DBB** on the set or remote control.

- Press **DBB** briefly to select the various level of bass boost.
→ The **DBB** button lights up.
→ The display message "**BASS 1, 2 or 3**" will scroll across the display.
→ The display will be as follows:



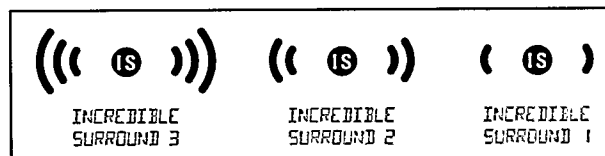
To switch off DBB

- Press **DBB** briefly until the **DBB** button light is switched off and "**BASS OFF**" scroll across the display.

Incredible Surround

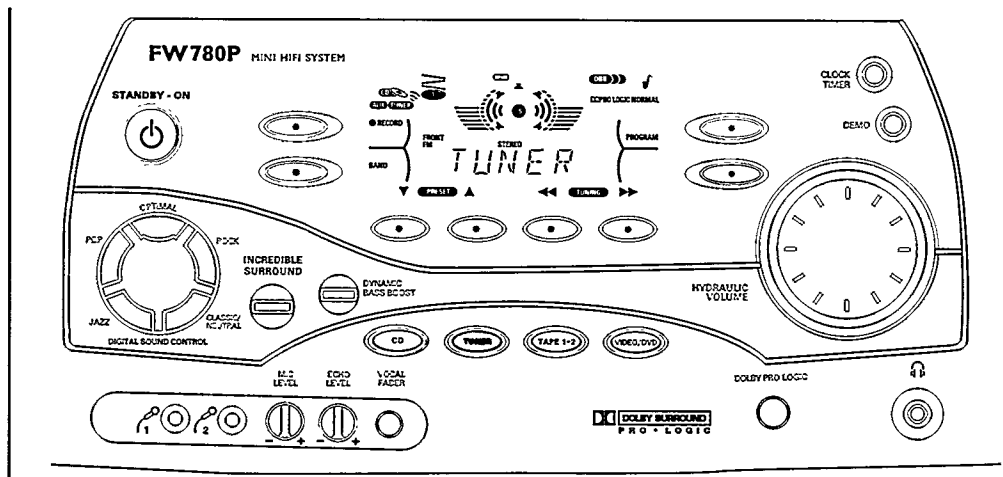
There are 3 settings for the Incredible Surround sound mode to creates a phenomenal surround sound effect. You can press **Incredible Surround** on the set or remote control.

- Press **INCREDIBLE SURROUND** to select the various level of surround sound.
→ The **INCREDIBLE SURROUND** button lights up.
→ The display message "**INCREDIBLE SURROUND 3, 2 or 1**" will scroll across the display.
→ The display will be as follows:



To switch off Incredible Surround

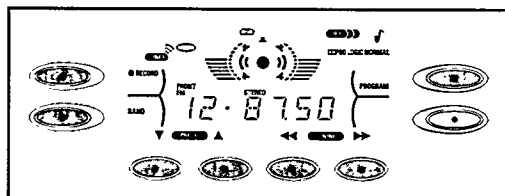
- Press **INCREDIBLE SURROUND** until the **INCREDIBLE SURROUND** button light is switched off and "**INCREDIBLE SURROUND OFF**" scroll across the display.



Tuning to radio stations

- 1 Press **TUNER** on the unit or on the remote control to select TUNER mode.
 - First **TUNER** appears on the display and after a few seconds it will show the current frequency or the station name if available.

The available display button functions light up:



- 2 Press **BAND** to select the desired waveband : FM or MW.
 - 3 Press **TUNING** ◀◀ or ▶▶ for more than one second and release.
 - The display will show 'SEARCH' until a station with sufficient signal strength is found.
- Repeat this procedure until the desired station is reached.
 - To tune to a weak station, briefly press TUNING ◀◀ or ▶▶ until the display shows the right frequency and/or when the best reception has been obtained.

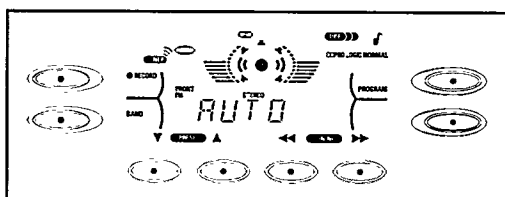
Note:

If you briefly press TUNING ◀◀ or ▶▶ (◀◀ or ▶▶ on the remote control), the frequency changes step by step.

Storing Preset Stations

You can store up to 20 stations in the memory. When a preset station is selected, the preset number appears next to the frequency on the display.

Automatic programming



- 1 Press **TUNER** on the unit or on the remote control.
- 2 Press **PROGRAM** for more than one second.
 - **PROGRAM** flashes and 'AUTO' is displayed.
 - Every available station will be stored automatically. The frequency and preset number will be displayed briefly.
 - It will stop searching when all the available stations are stored or the memory for 20 preset stations is used.
 - The set will remain tuned to the last stored preset number.

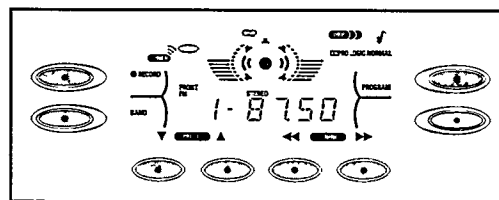
- You can cancel the automatic programming by pressing **PROGRAM** or ■.

Note:

If you want to reserve a section of preset numbers, for example preset number 1 to 9, select preset 10 before starting automatic programming: now only the preset numbers 10 to 20 will be programmed.

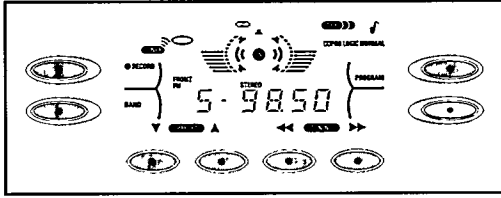
Manual programming

- 1 Press **TUNER** on the unit or on the remote control.
- 2 Press **PROGRAM** for less than one second.
 - **PROGRAM** flashes on the display.



- 3 Press **BAND** to select the desired waveband : FM or MW.
 - 4 Press **TUNING** ◀◀ or ▶▶ to tune to the desired frequency.
 - 5 Press **PRESET** ▼ or ▲ (or **PREV** ◀ / **NEXT** ▶) on the remote control) to select a preset number.
 - 6 Press **PROGRAM** again.
 - **PROGRAM** stop flashing, and the station is stored.
- Repeat the above procedure to store other preset stations.

Tuning to Preset Stations



- Press PRESET ▼ or ▲ (or PREV ◀ / NEXT ▶) on the remote control) to select the desired preset number.
→ The preset number, frequency and waveband appear on the display.

Record Tape

- 1 As soon as you press ● RECORD, the current sound will be recorded on TAPE DECK 2, provided a cassette suitable for recording is loaded.
- 2 To stop recording, press ■ (or STOP ■ on the remote control).

Note:

It is recommended that you select normal stereo when recording.

Changing the FM/MW tuning grid

(For specific versions only)

The frequency step can be changed if necessary. In North and South America, the frequency step between adjacent channels in the FM/MW band is 100 kHz/10 kHz. In other parts of the world, it is 50 kHz/9 kHz. The frequency step presetted in the factory is 9 KHz.

For FM Band : change from 50 kHz to 100 kHz or vice versa

For MW Band : change from 9 kHz to 10 kHz or vice versa

Changing of tuning grid will erase all previously stored preset stations.

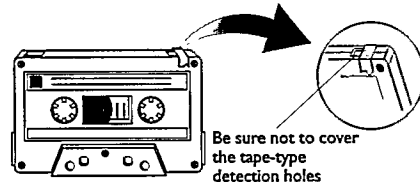
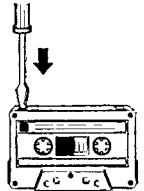
While in TUNER mode, press the TUNER button for **more than 5 seconds**. Display will shows "GRID 10" or "GRID 9".

Note:

GRID 9 indicates that the tuning grid is in step of 50 kHz in FM band and 9 kHz in MW band. GRID 10 indicates that the tuning grid is in step of 100 kHz in FM band and 10 kHz in MW band.

General Information

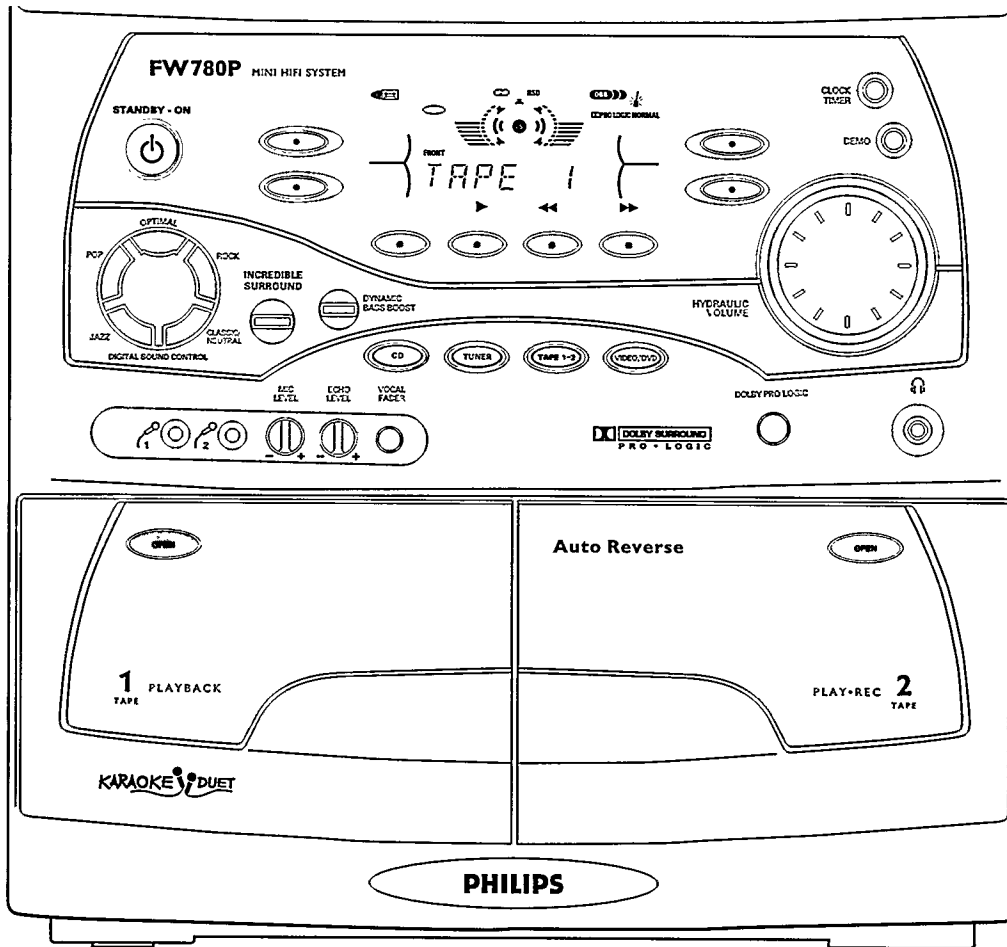
- For recording, use only a cassette of IEC type I (normal cassette) or IEC type II (Chrome). The respective cassette type is selected automatically.
- The tape in the cassette is secured at both ends with a leader tape. At the beginning and end of a cassette, nothing will be recorded for six to seven seconds.
- The recording level is set automatically, regardless of the position of VOLUME.
- Check and tighten slack tape with a pencil before use. Slack tape may get jammed or may burst in the mechanism.
- To prevent accidental recording, break out the tab on the left shoulder of the cassette side you want to protect.
- To re-record the cassette, cover each hole with cellophane tape. Do not cover the Chrome tape detection hole when covering the tab opening.



- C-120 tape is extremely thin and may be easily deformed or damaged. It is not recommended for use in this unit.
- Store the cassettes at room temperature and do not put them too close to a magnetic field (for example, transformers, TVs or speakers).

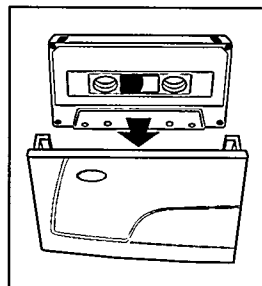
Cassette Deck

English

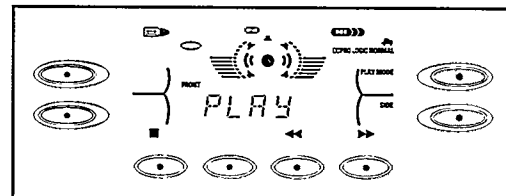


Loading a cassette

- Press **OPEN**.
- The cassette compartment door opens.
- Load the cassette with the open side downward and the full spool to the left.
- Close the cassette compartment door.
 - The deck automatically selects the tape type (NORMAL or CHROME (CrO₂)).



- 3 Press **PLAY** ► (or **PLAY** ► on the remote control) to start playback.



- 3a (For Tape Deck 2 only.) Press **SIDE** (or **SIDE** on the remote control) to change the direction of the play mode.
 - The **FRONT** or **BACK** flag appears in the display, depending on the side selected.

- 3b (For Tape Deck 2 only.) Press **PLAY MODE** to select the different type of play mode (see continuous playback).

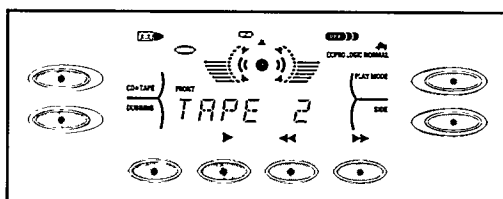
- 4 Press **STOP** ■ (or **STOP** ■ on the remote control) to end playback.

Note:

When the cassette has stopped playing, the set will switch to the standby mode automatically after 15 minutes if no button is pressed.

Tape Playback

- 1 Press **TAPE 1-2** (or **TAPE 1/2** on the remote control) to select either TAPE 1 or TAPE 2 mode.






- 2 Load the cassette into the desired **cassette deck**.

Cassette Deck

CD
TUNER
VIDEO/DVD

Continuous Playback (only on TAPE DECK 2)

The PLAY MODE enables you to select the different play modes.

-  : recording or playback on one side of the cassette in the normal or reverse direction. The cassette stops at the end of one side.
-  : recording or playback on both sides of the cassette; first in one direction and then in the reverse direction. The cassette then stops.
-  : continuous playback on both sides of the cassette up to a maximum of 5 times per side unless you press STOP ■.

Winding/Rewinding

At the stop mode

- 1 You can rewind or wind the cassette by pressing ◀◀ or ▶▶, (◀◀ or ▶▶ on the remote control) respectively.
→ The cassette will stop automatically at the end of the winding or rewinding
- 2 Press STOP ■ (or STOP ■ on the remote control) to stop winding or rewinding.

During playback

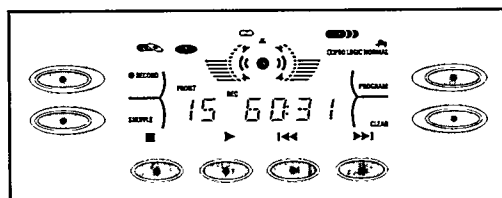
- 1 You can search for a particular passage or beginning of a track by pressing and holding ◀◀ or ▶▶, (◀◀ or ▶▶ on the remote control) respectively.
→ During searching, the sound is reduced to a low volume.
→ When you release ◀◀ or ▶▶, the cassette continues playing.

Note:

During winding or rewinding a cassette, it is possible to select another source mode (e.g. TUNER, CD or VIDEO/DVD mode).

Recording from other sources (only on TAPE DECK 2)

- 1 Press TAPE 1-2 to select tape deck 2.
- 2 Load a blank cassette into tape deck 2.
- 3 Press SIDE to change to the desired direction of the play mode.
→ The FRONT or BACK flag appears in the display, depending on the side selected.
- 4 Press PLAY MODE to select the play mode (I or D).
- 5 Press CD, TUNER or VIDEO/DVD.



- 6 Press ● RECORD to start recording.
→ The RECORD flag starts flashing.
- 7 Press STOP ■ to stop recording.

Notes:

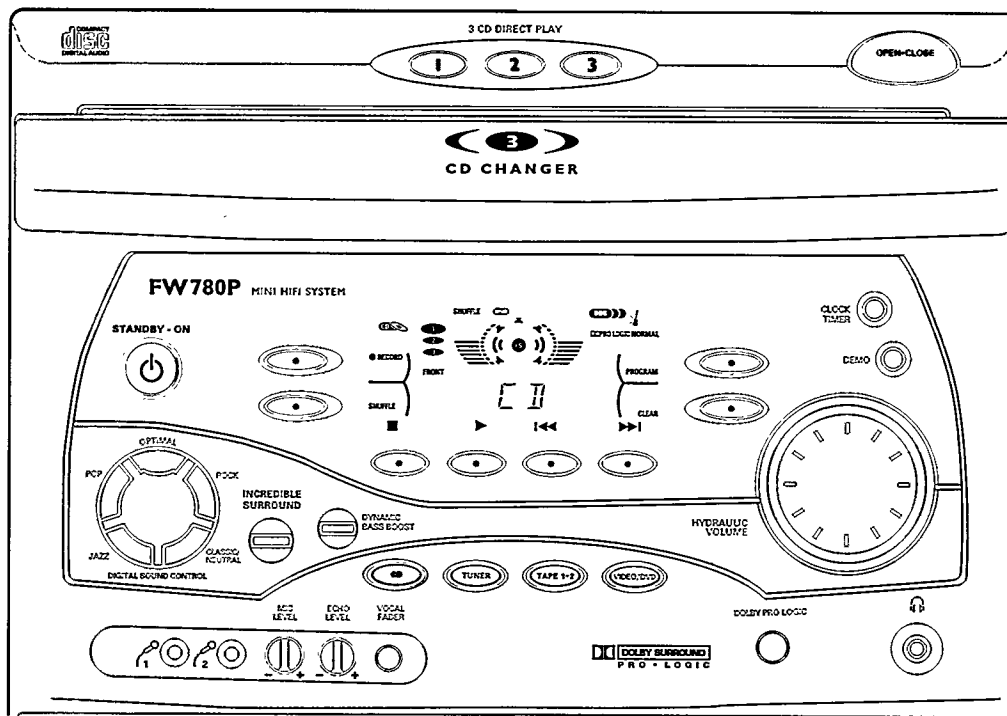
1. It is recommended that you select normal stereo when recording.
2. Only I or D mode is available during recording.
3. For CD Synchro-start recording see Compact Disc section.
4. During recording, it is not possible to listen to another sound source.

Dubbing cassettes (from TAPE DECK 1 to TAPE DECK 2)

- 1 Press TAPE 1-2 to select tape deck 2.
- 2 Load the prerecorded cassette into tape deck 1 and a blank cassette into tape deck 2.
→ Make sure that both cassettes have their full spools to the left.
- 3 Press SIDE to select the FRONT side of the cassette in tape deck 2.
- 4 Press DUBBING and then press ◀◀ or ▶▶ for respective dubbing speed mode.
→ NORMAL (normal speed) or FAST (high speed) appears on the display.
- 5 Press DUBBING again to start recording.
→ The RECORD flag starts flashing.
→ HSD appears on the display for high speed dubbing.
- 6 Press STOP ■ to stop dubbing.

Notes:

- At the end of side A, flip the cassettes to side B and repeat the procedure.
- Dubbing of cassettes is only possible in the TAPE DECK 2. To ensure good dubbing, use cassettes of the same length.
- During high speed dubbing in Tape mode, the sound is reduced to a low volume.
- You can switch to other sound source while dubbing.

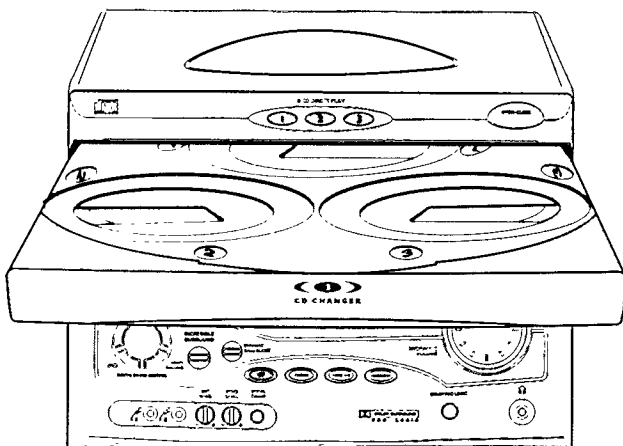


Warning!

- 1) This set is designed for conventional CDs. Do not use any accessories like disc stabilizer rings or CD treatment sheets, etc., which may damage the CD mechanism.
- 2) Do not load more than one disc into each tray.
- 3) When the CD changer is loaded with CD(s), do not turn over or shake the unit as this may jam the changer mechanism.




You can load up to three discs in the CD changer for continuous play without interruption. In addition to the conventional 12-cm disc, 8-cm discs can also be used without an adaptor.

Loading the CD Changer



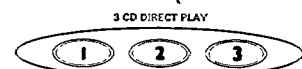
- 1 Press **CD** on the unit or on the remote control to select CD mode.
- 2 Press **OPEN•CLOSE**.
→ The CD compartment slides out.
- 3 Load a CD with the **printed side up** in the right tray.
 - You can load another disc in the left tray.
 - To load the third disc, press the corresponding **3 CD DIRECT PLAY** button of the empty tray.
→ The CD changer carousel will rotate until the empty tray is at the right hand side and is ready for loading.
→ Playback will always start with the outer right disc tray.
- 4 Press **OPEN•CLOSE** to close the CD compartment.
→ The total number of tracks and playing time of the last selected disc appear on the display.

The following display indications will help you to know whether the disc trays are empty or loaded.

-  – indicates that disc tray 1 is empty.
-  – indicates that disc tray 2 is loaded with a disc.
-  – indicates that disc tray 3 is loaded and selected.

3 CD Direct Play button

- When the button is green, it indicates that there is no disc loaded in the disc tray.
- When the button is red, it indicates that there is a disc loaded in the disc tray.

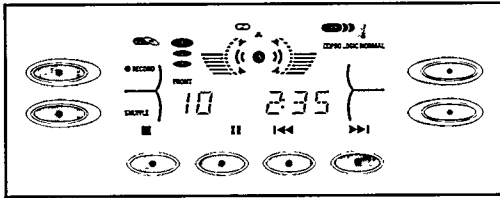


CD Changer

English

Playing a CD

- 1 Press **▶** (or **PLAY ▶** on the remote control) to start playback.
→ The disc tray, track number and elapsed playing time of the current track appear on the display.



- To interrupt play, press **⏸** (or **PAUSE ⏸** on the remote control).
→ The playing time flashes.
 - To resume play, press **▶** again (or **PLAY ▶** on the remote control).
- 2 To stop play, press **■** (or **STOP ■** on the remote control).

Note:

All the available discs will play once, then stop. When the CD has stopped playing, the set will switch to the standby mode after 15 minutes if no button is pressed.

When the CD tray is closed, you can play a CD directly by pressing the **3 CD DIRECT PLAY (1 - 3)** buttons on the set (or **DISC UP** button on the remote control). The CD player will stop at the end of playback of the selected disc.



Selecting a desired track

Selecting a desired track at the stop mode

- 1 Press **⏮** or **⏭** (**PREV ⏮** / **NEXT ⏭** on the remote control) until the desired track appears on the display.
- 2 Press **▶** (or **PLAY ▶** on the remote control) to start playback.
→ The selected track number and elapsed playing time appear on the display.

Selecting a desired track during play mode

- 1 Press **⏮** or **⏭** (**PREV ⏮** or **NEXT ⏭** on the remote control) until the desired track appears on the display.
→ The selected track number and elapsed playing time appear on the display.
- If you press **⏮** once it will skip to the beginning of the current track and play the track again.

Searching for a particular passage during play mode

- Press and hold **⏮** or **⏭** (**⏮** or **⏭** on the remote control) until the desired passage is located.
→ After 5 seconds, it will go into high speed search and the volume is reduced.
- Play returns to normal when **⏮** or **⏭** is released.

Shuffle

SHUFFLE – playing all the available discs and their tracks in random order. It can also be used when tracks are programmed.

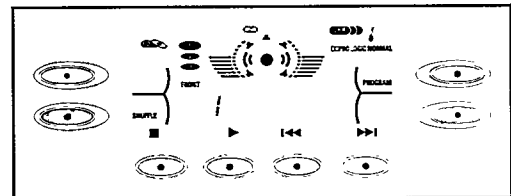
To shuffle all the discs and tracks

- 1 Press **SHUFFLE** (or **SHUFFLE** on the remote control).
→ "SHUFFLE" flashes briefly on the display.
→ The SHUFFLE flag, the disc and the track selected at random appear on the display.
- The discs and the tracks will now be played in random order until you press **■**.
- 2 Press **SHUFFLE** again to resume normal playback.
→ The SHUFFLE flag disappears from the display.

Programming Tracks

Programming tracks of a loaded CD is possible in the stop mode of the CD. The display will indicate the total tracks stored in the program. Up to 40 tracks can be stored in the memory in any order. When 40 tracks are stored and you attempt to store another track, the display will show "PROGRAM FULL".

- 1 Load the desired discs in the disc trays.
- 2 Press **PROGRAM** to start programming.
→ The PROGRAM flag flashes on the display.



- 3 Press the desired disc button to select the disc.
- 4 Press **⏮** or **⏭** to select the desired track.
- 5 Press **PROGRAM** to store the track.
- Repeat steps 3 to 5 to store other discs and tracks.
- 6 Press **■** once to end programming mode.
→ The total number of tracks programmed and total playing time appear on the display.

Note:

If the total playing time is more than "99:59" or one of the programmed tracks has a number greater than 30, then "--:--" is displayed instead of the total playing time.

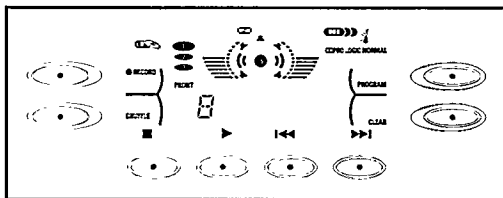
Playing the program

- 1 Press **▶** (or **PLAY ▶** on the remote control) to start program playback.
 - "PROGRAM PLAYS" appears on the display.
 - The track number and elapsed playing time of the current track will appear on the display.
- 2 Press **■** (or **STOP ■** on the remote control) to stop program playback.

Note:

If you press any of the 3 CD DIRECT PLAY buttons, the set will play the selected disc or track and the stored program will be ignored temporarily. The PROGRAM flag will also temporarily disappear from the display and then reappear when the playback for the selected disc ends.

Reviewing the program



Reviewing of the program is only possible in the stop mode.

- Press **◀◀** or **▶▶** repeatedly to review the programmed tracks.
- Press **■** to exit review mode.

Erasing the program (in the stop position)

- Press **CLEAR** on the set.
 - "PROGRAM CLEARED" appears on the display.

Note:

The program is also erased when the set is disconnected from the power supply. If the CD carousel is opened, the tracks belonging to the outer two trays will be erased and "CLEARED" will scroll on the display once.

● Record Tape

- 1 As soon as you press **● RECORD**, the current sound will be recorded on TAPE DECK 2, provided a cassette suitable for recording is loaded.
- 2 To stop recording, press **■** (or **STOP ■** on the remote control).

Note:

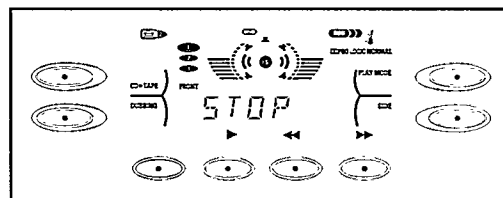
It is recommended that you select normal stereo when recording.

CD Synchro Start Audio Recording

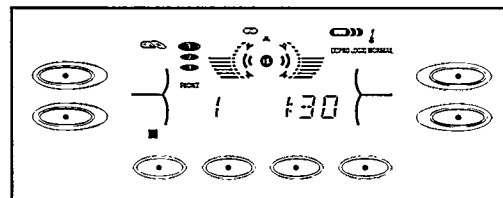
During CD synchro start audio recording,

- It is not advisable to fast forward/rewind your cassette in TAPE DECK 1.
- It is not possible to listen to another sound source.

- 1 Press **CD** on the unit or on the remote control to select CD mode.
- 2 Load a disc into the disc tray.
- 3 You can program the tracks in the order you want them to be recorded (see Programming Tracks). If not, the tracks are recorded according to the selected disc.
- 4 Press **TAPE 1-2** (or **TAPE 1/2** on the remote control) to select **tape deck 2**.

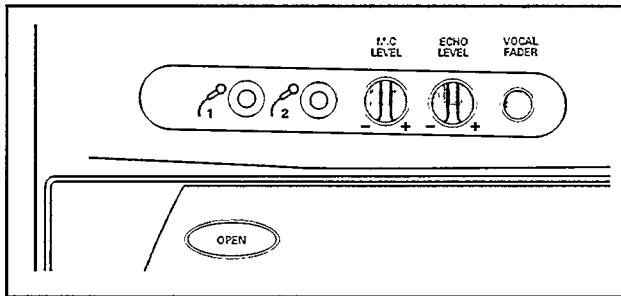


- 5 Load a blank cassette (full spool to the left) into **tape deck 2**.
- 6 Press **SIDE** to select the **FRONT** side of the cassette.
 - The **FRONT** flag appears in the display.
- 7 Press **PLAY MODE** to select the play mode (**⏮** or **⏭**) for **tape deck 2**.
- 8 Press **CD ▶ TAPE** to start recording.
 - The **RECORD** flag flashes on the display.
 - The CD starts playing after a seven-second delay to prevent recording on the leader tape at the beginning of the cassette.




- 9 Press **■** to stop recording.

Karaoke



Microphone mixing

- 1 Set the **MIC LEVEL** control to the minimum level to prevent acoustic feedback (e.g. a loud howling sound) before you connect the microphone.
- 2 Connect either 1 or 2 microphones to the mic socket.
- 3 Press **CD**, **TUNER**, **TAPE 1-2** or **VIDEO/DVD**.
- 4 Play the selected source.
- 5 Adjust the volume with **VOLUME** control.
- 6 Adjust the **MIC LEVEL** control to the mixing level that you want.
- 7 Adjust the **ECHO LEVEL** control to the echo level that you want.
- 8 Press **VOCAL FADER** to suppress the vocals on special recorded Karaoke CDs.
 - When the VOCAL FADER is switched on, the  appears on the display.
- 9 Start singing or talking through the microphone.

Recording the mixed sound

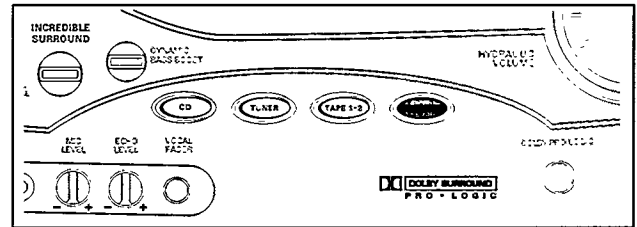
During microphone mixing, you can record the mixed sound on a cassette in TAPE DECK 2.

- 1 Load a blank cassette in **tape deck 2**.
- 2 Press **RECORD**.

Notes:

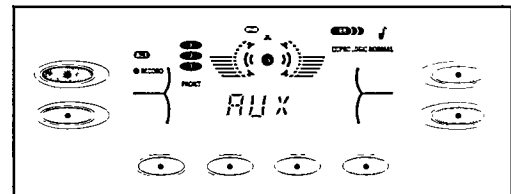
1. For maximum VOCAL FADER effect, you are advised to switch off the Incredible Surround.
2. If you do not intend to record via the microphone, unplug the microphone to avoid accidental mixing with other recording source.
3. It is not possible to record the mixed sound through a microphone during cassette Dubbing mode.
4. When the VOCAL FADER is switched on, the Dolby Pro Logic will be automatically switched to normal stereo mode.

Selecting External Connection



If you have connected the audio out of the external equipment (TV, VCR, Laser Disc player or DVD) to the AUX IN sockets, you can hear the enhanced sound from the system.

- Press **VIDEO/DVD** on the unit (or **AUX/TV** on the remote control) to select AUX mode.
 - **AUX** appears on the display.
 - The available display button functions light up:

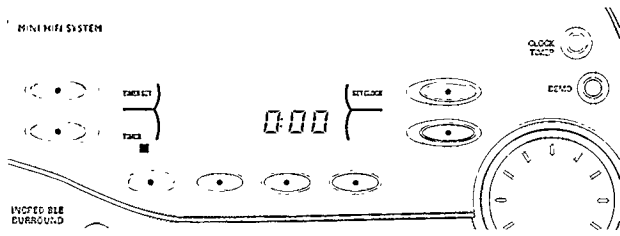


Record Tape

- 1 As soon as you press **RECORD**, the current sound will be recorded on TAPE DECK 2, provided a cassette suitable for recording is loaded.
- 2 To stop recording, press **STOP** (or **STOP** on the remote control).

Note:

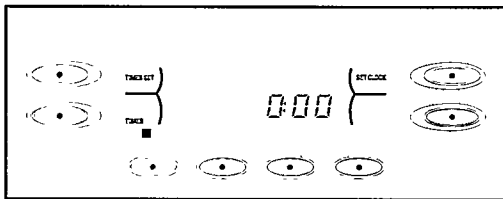
It is recommended that you select normal stereo when recording.



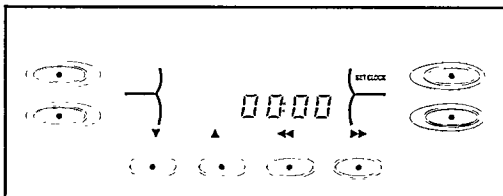
Setting the clock

The clock is in 24-hour mode, e.g. 00:00 or 23:59.

- 1 Press **CLOCK•TIMER**.
→ "0:00" starts flashing.



- 2 Press **SET CLOCK**.
→ "00:00" starts flashing



- 3 Set the hour with ▼ or ▲.
- 4 Set the minute with ◀◀ or ▶▶.
- 5 Press **SET CLOCK** again to store the setting.
→ The clock starts running.

Note:

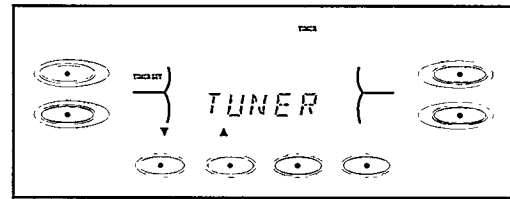
- When a power interruption occurs, the clock settings are erased.

Setting the Timer

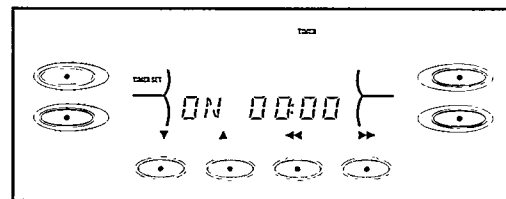
- The system can switch on to CD, TUNER or TAPE 1 mode automatically at a preset time. It can serve as an alarm to wake you up. After half an hour from the preset time, the system will return to the standby mode if no button is pressed.
- Before setting the timer, make sure the clock is set correctly.
- The timer works only once for each setting.
- **The volume of the timer will be at the last setting before the set is switched to standby mode.**

Timer Setting

- 1 Press **CLOCK•TIMER**.
- 2 Press **TIMER SET**.
→ The **TIMER** flag flashes.



- 3 Press ▼ or ▲ to select the desired source.
→ The display will switch as follows:
TUNER → TAPE 1 → CD → TUNER .
- 4 Press **TIMER SET** to confirm your selection.
→ The display will show "ON 00:00 " and "00:00 " flashes.



- 5 Press ▼ or ▲ to set the hour for the timer to start.
- 6 Press ◀◀ or ▶▶ to set the minutes for the timer to start.
- 7 Press **TIMER SET** to store the start time.
→ The **TIMER** is now set.
→ The **TIMER** flag remains lit.

To stop the **TIMER**

- 1 Press **CLOCK•TIMER**.
- 2 Press **TIMER** on the set.
→ The **TIMER** is now off.

To start the **TIMER** again

- 1 Press **CLOCK•TIMER**.
- 2 Press **TIMER** on the set.
→ The display will show the last set start time of the **TIMER** and its flag.
→ The **TIMER** flag remains lit.

Notes:

1. If the source selected is **TUNER**, the last tuned frequency will be switched on.
2. If the source selected is **CD**, the first track of the last selected disc will be played. If the **CD** trays are empty, the **TUNER** source will be selected instead.
3. If the source selected is **TAPE 1**, when the preset time is reached during high speed dubbing, the **TUNER** source will be selected instead.

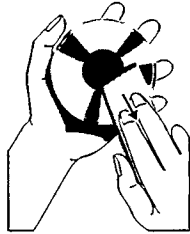
Maintenance

Cleaning the Cabinet

- Use a soft cloth slightly moistened with a mild detergent solution. Do not use a solution containing alcohol, spirits, ammonia or abrasive.

Cleaning Discs

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center out.

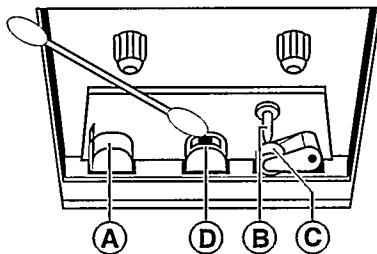


- Do not use solvents such as benzene, thinner, commercially available cleaners, or antistatic spray intended for analog records.

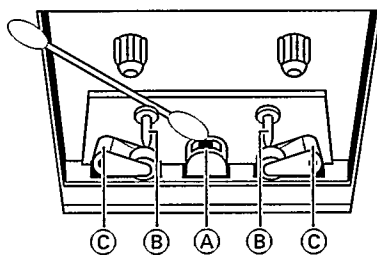
Cleaning the Heads and the Tape Paths

- To ensure good recording and playback quality, clean the heads (A) and (D), the capstan(s) (B), and pressure roller(s) (C) after every 50 hours of tape operation.

Tape Deck 1



Tape Deck 2



- Use a cotton swab slightly moistened with cleaning fluid or alcohol.
- You can also clean the head by playing a cleaning tape through once.

Demagnetizing the heads

- Use a demagnetizing cassette available at your dealer.

Specifications

AMPLIFIER

Output power	1500 W PMPO
DPL mode FRONT	2 x 50 W (±1 dB)
CENTER	25 W (±1 dB)
SURROUND	25 W (±1 dB)
Normal Stereo	2 x 50 W (10% THD)
Power band width	40 - 20000 Hz
Frequency response	40 - 20000 Hz
Signal-to-noise ratio	≥ 75 dBA
Stereo separation	≥ 50 dB (1 kHz)
Input sensitivity	
Aux	350 mV
Microphone (3.5mm)	2.5 mV
Outputs	
Speakers	
Left/Right/Surround	≥ 6 Ω
Center	≥ 12 Ω
Headphones (3.5mm)	32 Ω - 1000 Ω
Line Out at rated input sensitivity	350 mV

TUNER

FM wave range	87.5 - 108 MHz
MW wave range	
9 kHz Grid	531 - 1602 kHz
10 kHz Grid	530 - 1700 kHz
Sensitivity at 75 Ω, 26 dB S/N ratio, FM mono	3.88 μV
46 dB signal-to-noise ratio, FM Stereo	61.4 μV
FM Frequency response	63 - 12500 Hz (±3 dB)
Signal-to-noise ratio	≥ 50 dBA
Total Harmonic Distortion	< 3%

CD PLAYER

Frequency range	40 - 20000 Hz
Signal-to-noise	≥ 80 dBA
Channel separation	≥ 40 dB
Total harmonic distortion	≤ 65 dB

CASSETTE DECK

Frequency range	
CrO ₂ tape (type II)	80 - 14000 Hz (8 dB)
Normal tape (type I)	80 - 12500 Hz (8 dB)
Signal-to-noise ratio	
CrO ₂ tape (type II)	≥ 48 dBA
Normal tape (type I)	≥ 44 dBA
Wow and flutter	≤ 0.4% DIN

OUTPUT FOR ACTIVE SUBWOOFER (optional)

Output at maximum volume	500 mV
Output impedance	2000 Ω
Frequency response	20 - 20000 Hz

MAIN UNIT

Material/finish	Metal and polystyrene
Dimensions (w x h x d)	265 x 310 x 370 (mm)
Weight	9.5 kg approx.

SPEAKER BOX

Dimensions (w x h x d)	200 x 310 x 265 (mm)
Weight	3.25 kg approx.
Speaker woofer	1 x 5.25 inch
Speaker tweeter	1 x 2.5 inch
Speaker piezo	1 x 1 inch

Subject to modification

Troubleshooting Guide

Warning! Under no circumstances should you try to repair the set yourself, as this will invalidate the warranty.

- If a fault occurs, check the points listed below before taking the set for repair.
- Should any problems persist after you have made these checks, consult your nearest dealer or service center.

SYMPTOM	POSSIBLE CAUSE	REMEDY
RADIO RECEPTION		
The STEREO indicator flashes.	The signal is too weak.	Adjust the antenna.
Cannot tune to station	Wrong tuning grid.	Switch to the correct tuning grid.
Severe hum or noise.	The signal strength is too weak.	Adjust the antenna.
	The TV or VCR is too close to the stereo system.	Separate the stereo system from the TV or VCR. Connect an external antenna for better reception.
CASSETTE DECK OPERATION		
"CANNOT RECORD" is displayed.	No cassette in the cassette deck.	Insert a blank cassette into the cassette deck.
	The protection tab has been broken.	Put a piece of clear adhesive tape over the opening.
"RECORDING ACTIVE" is displayed.	A recording is active	Stop the recording or wait until it is finished.
Recording or playback cannot be made or there is a decrease in audio level.	Dirty tape heads.	See section on cassette deck maintenance.
	Magnetic build-up in the record/playback head.	Use demagnetizing cassette.
Excessive wow or flutter, or sound drop-out.	Contamination of the capstans or pressure rollers.	See section on cassette deck maintenance.
CD PLAYER OPERATION		
"NO DISC" is displayed.	The disc is inserted upside down.	Place CD with printed side up.
	Moisture condensation.	Wait until lens has adjusted to normal room temperature.
	There is no disc in the CD tray.	Insert a CD.
	The CD is dirty, badly scratched or warped.	Replace or clean the CD.
GENERAL		
Set not working.	Set does not react when buttons are pressed.	Press STANDBY-ON to switch the unit off, then switch it on again. Or, unplug the AC power plug from the wall outlet, then plug it in again.
No or poor sound.	Volume is not turned up.	Adjust VOLUME.
	The headphones are connected.	Disconnect the headphones.
	Speakers are not connected or are connected wrongly.	Check that the speakers are connected correctly. Make sure that the stripped speaker wire is clamped.
Reversed left and right sound.	Speakers are connected wrongly.	Check the speaker connections and speaker location.
Lack of bass sound or apparently imprecise physical location of musical instruments.	Speakers are connected wrongly.	Check the speaker connection for proper phasing, red/black wires to red/black terminals.
Clock blinking.	There was a power disruption.	Reset the clock.
Remote control has no effect on the set.	The distance to the system is too large.	Reduce the distance.
	Batteries are inserted incorrectly.	Insert the batteries correctly.
	Batteries are exhausted.	Replace the batteries.
	Wrong sound source is selected.	Select the sound source before pressing the function button, (PLAY, PREV/NEXT, etc.).
Timer not working.	Timer not on.	Press TIMER on the set to switch on the timer.
	Dubbing/recording is active.	Stop dubbing/recording.
"PRESS DEMO TO EXIT" is displayed.	Demo mode is switched on.	Press STANDBY-ON or DEMO to switch off the demo.
Hydraulic Volume Control knob not protruding or retracting.	Volume knob is locked.	Press DBB on set or remote control for more than 3 seconds to unlock volume knob.

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