



# PHILIPS

**FW-P88**

**Mini Hi-Fi System**  
with 3 CD changer



**PHILIPS**

*Let's make things better.*



English

Français

Español

Deutsch

Nederlands

Italiano

Svenska

Dansk

Suomi

Português

Ελληνικά

### Important notes for users in the U.K.

#### Mains plug

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

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

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

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

**Note:** The severed plug must be disposed of to avoid a possible shock hazard should it be inserted into a 13 Amp socket elsewhere.

#### How to connect a plug

The wires in the mains lead are coloured with the following code: blue = neutral (N), brown = live (L).

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

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

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

#### Copyright in the U.K.

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

### Italia

#### DICHIARAZIONE DI CONFORMITA'

Si dichiara che l'apparecchio FW-P88 Philips risponde alle prescrizioni dell'art. 2 comma 1 del D.M. 28 Agosto 1995 n. 548.

Fatto a Eindhoven

Philips Consumer Electronics  
Philips, Glaslaan 2  
5616 JB Eindhoven, The Netherlands

### Norge

Typeskilt finnes på apparatens underside.

**Observer:** Nettbryteren er sekundert innkopleet. Den innebygde nettdelen er derfor ikke frakopleet nettet så lenge apparatet er tilsluttet nettkontakten.

For å redusere faren for brann eller elektrisk støt, skal apparatet ikke utsettes for regn eller fuktighet.



# INDEX



**CLASS 1  
LASER PRODUCT**

<b>English</b> .....	<b>4</b>	English
<b>Français</b> .....	<b>32</b>	Français
<b>Español</b> .....	<b>60</b>	Español
<b>Deutsch</b> .....	<b>88</b>	Deutsch
<b>Nederlands</b> .....	<b>118</b>	Nederlands
<b>Italiano</b> .....	<b>146</b>	Italiano
<b>Svenska</b> .....	<b>174</b>	Svenska
<b>Dansk</b> .....	<b>202</b>	Dansk
<b>Suomi</b> .....	<b>230</b>	Suomi
<b>Português</b> .....	<b>258</b>	Português
<b>Ελληνικά</b> .....	<b>286</b>	Ελληνικά



# CONTENTS

English

<b>General Information .....</b>	<b>5</b>
<b>Safety Information .....</b>	<b>5</b>
<b>Preparation .....</b>	<b>6 - 7</b>
<b>Dolby Pro Logic .....</b>	<b>8 - 9</b>
<b>Controls .....</b>	<b>10 - 12</b>
<b>Operating The System .....</b>	<b>13 - 16</b>
<b>CD .....</b>	<b>17 - 19</b>
<b>Tuner .....</b>	<b>20 - 22</b>
<b>AUX/CDR .....</b>	<b>22</b>
<b>Tape .....</b>	<b>23 - 24</b>
<b>Recording .....</b>	<b>25 - 26</b>
<b>Clock .....</b>	<b>27</b>
<b>Timer .....</b>	<b>27 - 28</b>
<b>Sleep Timer .....</b>	<b>28</b>
<b>Specifications .....</b>	<b>29</b>
<b>Maintenance .....</b>	<b>30</b>
<b>Troubleshooting .....</b>	<b>30 - 31</b>

## GENERAL INFORMATION

### General Information

- **The type plate (which contains the serial number) is located at the rear of the system.**
- **Recording is permissible if copyright or other rights of third parties are not infringed.**
- **This product complies with the radio interference requirements of the European Community.**

### Environmental Information

All unnecessary packaging has been omitted. We have tried to make the packaging easy to separate into three materials: cardboard (box), polystyrene foam (buffer) and polyethylene (bags, protective foam sheet).

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

### Energy Star



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

### Acknowledgement



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

### Accessories (Supplied)

- Remote control
- Batteries (two AA size) for remote control
- AM loop antenna
- FM wire antenna
- AC power cord
- CS-540 speaker package (includes one pair of surround speakers and one center speaker)

## SAFETY INFORMATION

### 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 typeplate 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. Allow at least 10 cm clearance from the rear and the top of the unit and 5 cm from the each side.
- The system incorporates a built-in safety feature that prevents overheating.
- Do not expose the system to excessive moisture, rain, sand or heat sources.
- Under no circumstances should you repair the system yourself, as this will invalidate the warranty!

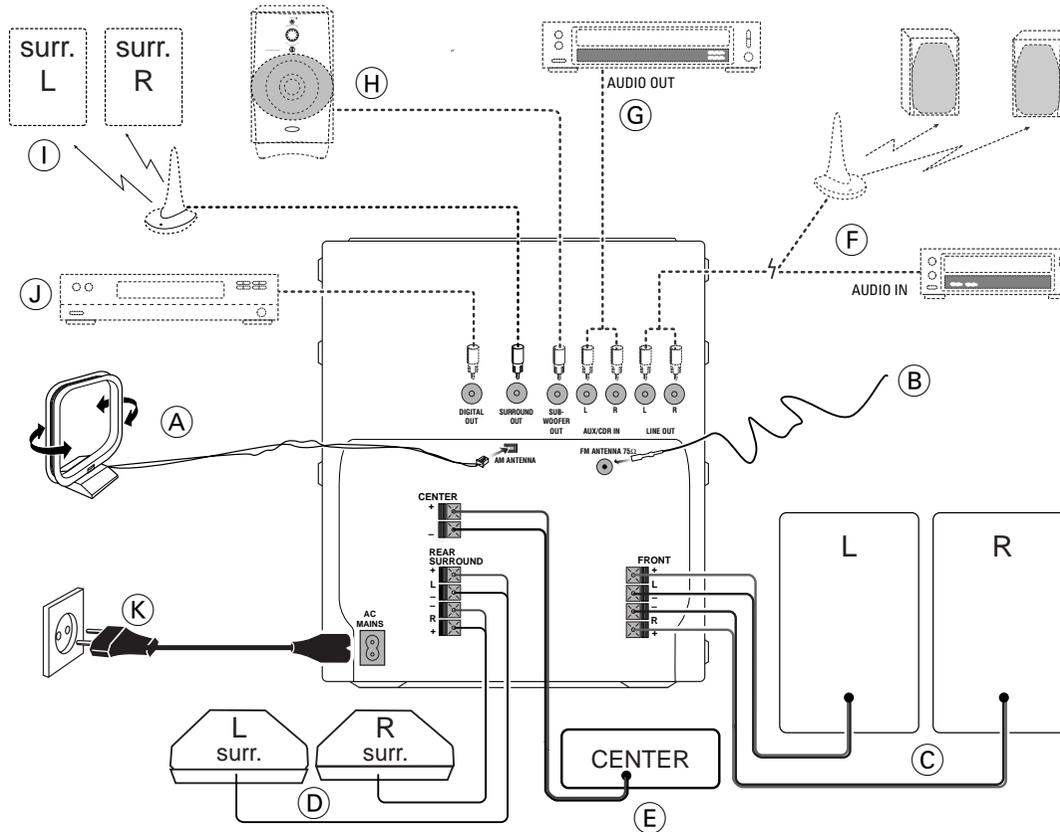
- If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens of the CD unit inside the system. Should this occur, the CD player will not operate normally. Leave the power on for about one hour with no disc in the system until 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.**

English

# PREPARATION

English

## Rear Connections



### (A) AM Loop Antenna Connection

Connect the supplied loop antenna to the AM ANTENNA terminal. Place the AM loop antenna far away from the system and adjust its position for the best reception.

### (B) FM Wire Antenna Connection

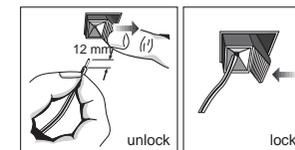
Connect the supplied FM wire antenna to the FM ANTENNA 75  $\Omega$  terminal. Adjust the position of the FM antenna for the best reception.

#### Outdoor Antenna

For better FM stereo reception connect an outdoor FM antenna to the FM ANTENNA 75  $\Omega$  terminal using a 75  $\Omega$  coaxial wire.

### (C) Speakers Connection

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



## PREPARATION

English

### CAUTION:

- For optimal sound performance, it is recommended to use the supplied speakers.
- Do not connect more than one speaker to any one pair of + / – speaker terminal.
- Do not connect speakers with impedance lower than the speakers supplied. Please refer to SPECIFICATION section of this manual.

### D Rear Surround Speakers' Connection

Connect the black (non-marked) wires to the black REAR SURROUND terminals and the colored (marked) wires to the grey REAR SURROUND terminals.

### E Center Speaker Connection

Connect the black (non-marked) wires to the black CENTER terminal and the blue (marked wires) to the blue CENTER terminal.

### F Line Out Connection (wireless ready)

You can connect the audio left and right LINE OUT terminals to a optional CD Recorder ANALOG IN terminals. This allows you to record in an analogue format.

You can also install additional optional front active speakers away from the system (e.g. in another room) to reduce the inconvenience of running long speaker wires across rooms. You can place as many remote speakers as you like provided they operate at the same radio frequency. Connect the wireless radio frequency transmitter to the LINE OUT terminals. Place the active speakers at your preferred location. Be sure to follow the instructions supplied with the active speakers.

### G Connecting other equipment to your system

You can connect the audio left and right OUT terminals of a TV, VCR, Laser Disc player, DVD player or CD Recorder to the AUX/CDR IN terminals at the rear of the system.

### H Subwoofer Out Connection

Connect the optional active subwoofer to the SUBWOOFER OUT terminal. The subwoofer reproduces just the low bass sound effect (e.g. explosions, the rumble of spaceships, etc.). Be sure to follow the instructions supplied with the subwoofer.

### I Wireless Surround Out Connection

You may connect transmitter unit of the wireless rear speakers (not supplied) to the SURROUND OUT terminal.

#### Note:

- Availability of wireless transmitter and its peripherals are subjected to the approval of local authorities. Please check with respective local safety or approving authority.

### J Digital Out Connection

You can record the digital sound from the CD, through this output, on any audio equipment with digital input (e.g. CD Recorder, Digital Audio Tape (DAT) deck, Digital to Analog Converter and Digital Signal Processor).

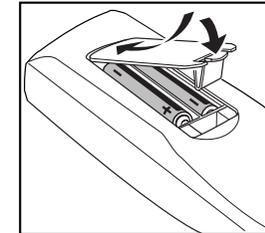
Connect one end of the cinch cable (not supplied) to the DIGITAL OUT socket and the other end to the audio equipment with digital input. When connecting the cinch cable, make sure it is fully inserted.

### K AC Power Supply

After all other connections have been made, connect the AC power cord to the system and to the wall outlet.

### Inserting batteries into the Remote Control

- Insert the batteries (Type R06 or AA) into the remote control as shown in the battery compartment.



- To avoid damage from possible battery leakage, remove dead batteries or batteries that will not be used for a long time. For replacement, use type R06 or AA batteries.

## DOLBY PRO LOGIC

English

### 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 definition of the individual sound sources. It produces greater sound separation between channels and provides pinpoint sound localization. Pro Logic provides four sound outputs: Left, Center, Right and Surround (Rear). Front sounds are produced from the pair of Left and Right speakers and a Center speaker. The surround sound is reproduced by two speakers placed at the rear of the listening area. Although the surround sound is monaural (single-source), a pair of speakers is necessary to produce the correct diffused sound.

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

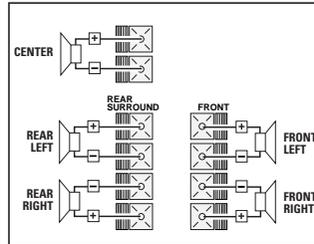
### Setting up the Dolby Pro Logic system

You must set up the system properly in order to enjoy the Home Cinema sound to the fullest. First, connect the speakers.

#### 5-Speaker Connection

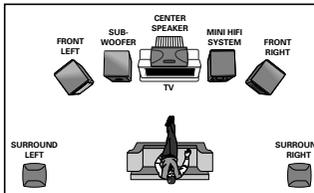
- **Front speakers:** Connect the front speakers.
- **Center speaker:** Connect the center speaker.

- **Rear (surround) speakers:** Connect either the wired rear surround speakers or a pair of wireless rear speakers (not supplied) to the SURROUND OUT terminals.



### Positioning the Speakers

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



#### Front Left and Right Speakers

For the best sound, place the Left and Right speakers at an angle of approximately 45 degrees to the listener. If the speakers' magnetic field affects the television picture, increase the distance between the TV and the speakers.

#### Center Speaker

For the best sound, place the center speaker at the same height as the left and right speakers. Place the center speaker directly above or beneath the television.

#### Rear (surround) Speakers

The surround speakers should be placed at normal listening ear level or mounted on the wall at the back of the room. Most important, experiment when placing the surround speakers in order to obtain the best sound.

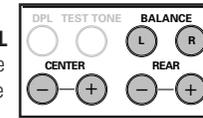
### Test Tone

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

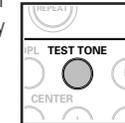
**You must sit at the ideal sitting position and use the remote control to perform this operation.**

- 1 Press **CD, TUNER, TAPE** or **AUX** to switch on the system.
- 2 Press **TEST TONE**.
  - A test signal is generated; it will move through the Left, Center, Right, and Surround speakers, in that order.
  - "TEST TONE" followed by "ADAPT BALANCE, CENTER AND REAR LEVEL" will be displayed.
  - The test signal will last for about 90 seconds.

- 3 Press **BALANCE L** to adjust the sound of the front left speaker.



- The display will show "BAL L +xx".
- 4 Press **BALANCE R** to adjust the sound of the front right speaker.
  - The display will show "BAL R +xx".
- 5 Press **CENTER +** or **-** to adjust the sound of the center speaker.
  - The display will show either "CENT +xx" or "-xx".
- 6 Press **REAR +** or **-** to adjust the sound of the surround speakers.
  - The display will show either "REAR +xx" or "-xx".
- 7 Adjust the sound of all the speakers until they are equal. When you are satisfied with the setting, press **TEST TONE** again to switch off the test signal.



Note:

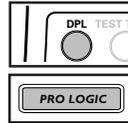
- It is advisable to set the speakers' level at normal listening level. "xx" denotes the sound level.



## DOLBY PRO LOGIC

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

- Press **DPL (PRO LOGIC)** repeatedly to select and cycle through the various sound modes.



**Dolby Surround** → **Dolby Center Phantom** → **Dolby 3 Stereo** → **Stereo** → **Dolby Surround ...**

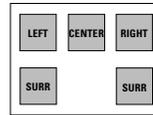
→ The Dolby Pro Logic display panel will light up with the selection.

### Dolby Surround

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

- Press **DPL** to select the Dolby Surround mode.

→ The message "DOLBY SURROUND" will be displayed.



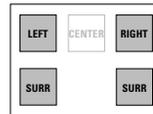
→ The DPL display panel will light up.

### Dolby Center Phantom

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

- Press **DPL** to select the Dolby Pro Logic Center Phantom mode.

→ The message "DOLBY CENTER PHANTOM" will be displayed.



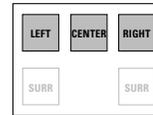
→ The DPL display panel will light up.

### Dolby 3 Stereo

Use this setting when full surround is not required, but a wide stereo sound is desired. It only requires the left, right and center speakers.

- Press **DPL** to select the Dolby 3 Stereo mode.

→ The message "DOLBY 3 STEREO" will be displayed.



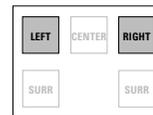
→ The DPL display panel will light up.

### Normal Stereo

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

- Press **DPL** to select the Stereo mode.

→ The message "STEREO" will be displayed.



→ The DPL display panel will light up.

### Important!

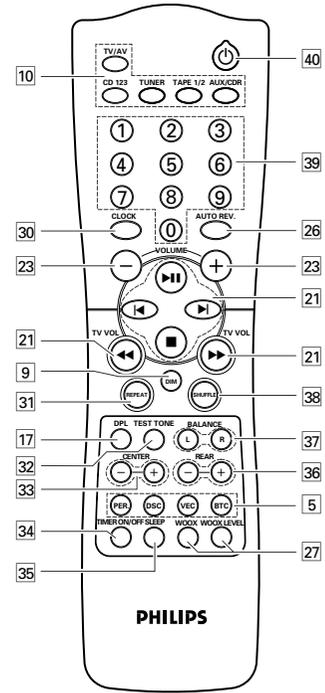
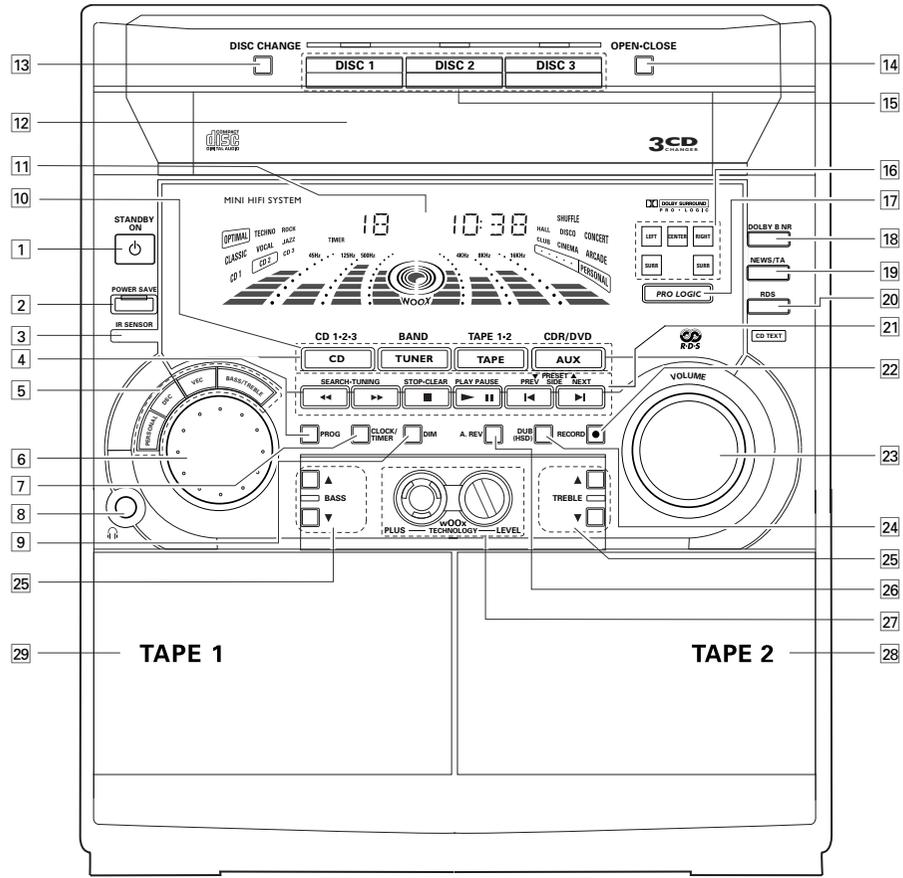
- 1 For the best Dolby Pro Logic sound, switch on DPL with DSC set to "Classic" and with VEC off.
- 2 Dolby Pro Logic mode will automatically switch to normal Stereo mode when headphones are connected.
- 3 Switch to normal stereo mode when you record on a tape.

English



# CONTROLS

English



## CONTROLS

English

### Controls on the system and remote control

#### 1 **STANDBY ON**

- to switch the system on or to standby mode.
- to use for EASY SET.

#### 2 **POWER SAVE**

- to switch the system to energy saving mode.

#### 3 **IR SENSOR**

- sensor for the infrared remote control.

#### 4 **PROG (PROGRAM)**

- for CD ..... to program CD tracks.
- for TUNER ..... to program preset radio stations.
- for CLOCK ..... to select 12 or 24 hour in clock setting mode *(on the system only)*.

- #### 5 **SOUND CONTROL**
- to select the desired sound feature : PERSONAL, DSC, VEC or BASS/TREBLE.

#### 6 **JOG**

- to select the desired sound effect of PERSONAL/DSC/VEC setting. You must select the respective sound feature first.

#### **PERSONAL**

- to select up to 6 personal preferred Spectrum Analyzer settings : PERSONAL 1-6.

#### **DSC**

- to select the desired Digital Sound Control effect : OPTIMAL, CLASSIC, TECHNO, VOCAL, ROCK or JAZZ.

#### **VEC**

- to select the desired Virtual Environment Control effect : HALL, CLUB, DISCO, CINEMA, CONCERT or ARCADE.

#### 7 **CLOCK/TIMER**

- to view the clock, set the clock or set the timer.

#### 8

- to connect headphones.

#### 9 **DIM**

- to select brightness for the display screen : DIM 1, DIM 2, DIM 3 or DIM OFF.

#### 10 **SOURCE**

- to select the following:  
**CD / (CD 1•2•3)**

- to select CD mode. When CD playback is stopped, press to select disc tray 1, 2 or 3.

#### **TUNER / (BAND)**

- to select Tuner mode. When in tuner mode; press to select the waveband: FM, MW or LW.

#### **TAPE / (TAPE 1•2)**

- to select Tape mode. When tape playback is stopped, press to select either tape deck 1 or 2.

#### **AUX / (CDR/DVD)**

- to select sound from an external source (e.g. TV, VCR, Laser Disc player, DVD player or CD Recorder). When in AUX mode, press to select either AUX or CDR/DVD.

#### **TV/AV** *(only on the remote control)*

- to select TV or Video mode.

#### 11 **DISPLAY SCREEN**

- to view the current setting of the system.

#### 12 **CD CAROUSEL TRAY**

#### 13 **DISC CHANGE**

- to change CD(s).

#### 14 **OPEN•CLOSE**

- to open or close the CD carousel tray.

#### 15 **DISC 1 / DISC 2 / DISC 3 (CD DIRECT PLAY)**

- to select a CD tray for playback.

#### 16 **DPL DISPLAY PANEL**

- to view the selected Dolby Pro Logic setting.

#### 17 **DOLBY PRO LOGIC (DPL)**

- to select Dolby Surround, Dolby Center Phantom, Dolby 3 Stereo or Stereo mode.

#### 18 **DOLBY B NR**

- to switch on or off Dolby B NR.

#### 19 **NEWS/TA**

- to hear News or Traffic Announcement data automatically.

#### 20 **RDS (CD TEXT)**

- for TUNER ..... to select RDS data in the following order:  
station name, program type and radio text.
- for CD ..... to view the CD encoded information.

#### 21 **MODE SELECTION**

#### **SEARCH ◀◀ ▶▶ (TUNING ◀◀ ▶▶ )**

- for CD ..... to search backward/forward.

- for TUNER ..... to tune to a lower or higher radio frequency.

- for TAPE ..... to rewind or fast forward a tape.

- for CLOCK ..... to set the hour *(on the system only)*.

- for TV VOL. .... to adjust the TV volume if the remote operates your TV.

#### **STOP•CLEAR ■**

- for CD ..... to stop CD playback or to clear a program.

- for TUNER ..... to stop programming.

- for TAPE ..... to stop playback or recording.

- for DEMO ..... *(on the system only)* to start or stop demonstration mode.

#### **PLAY PAUSE ▶ II**

- for CD ..... to start or interrupt playback.

- for TAPE ..... to start playback.

## CONTROLS

English

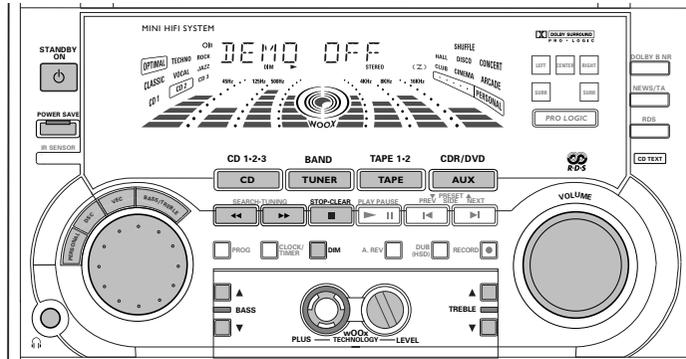
- ◀ PREV / SIDE / NEXT ▶ (PRESET ▼▲)**  
for CD ..... to skip to the beginning of the current, previous, or next track.  
for TUNER ..... to select a preset radio station in memory.  
for TAPE ..... to select tape side (back or front) in tape deck 2 only.  
for CLOCK ..... to set the minute (*on the system only*).
- 22 RECORD**  
– to start recording on tape deck 2.
- 23 VOLUME**  
– to increase or decrease the volume.
- 24 DUB (HSD) (HIGH SPEED DUBBING)**  
– to dub a tape in normal or fast speed.
- 25 BASS/TREBLE CONTROL** – to adjust BASS/TREBLE level :  
**BASS ▲ ▼**  
– to increase or decrease the low tone.  
**TREBLE ▲ ▼**  
– to increase or decrease the high tone.
- 26 A. REV (AUTO REVERSE)**  
– available in tape deck 2 only.  
– to select the desired play modes (◀ / ▶ / ⏮).
- 27 w00x PLUS**  
– to select between normal or enhanced w00x sound effect.
- w00x LEVEL**  
– to select desired w00x level : W00X 1, W00X 2 or W00X 3.
- 28 TAPE DECK 2**
- 29 TAPE DECK 1**
- 30 CLOCK**  
– to view clock display.
- 31 REPEAT**  
– to repeat a CD track, a disc, or all available discs.
- 32 TEST TONE**  
– to check the sound level of the Front Left, Front Right, Center and Surround speakers.
- 33 CENTER +/-**  
– to adjust the sound level of the center speaker.
- 34 TIMER ON/OFF**  
– to switch on or off timer.
- 35 SLEEP**  
– to switch the system to standby mode at a selected time.
- 36 REAR +/-**  
– to adjust the sound level of the surround speakers.
- 37 BALANCE L/R**  
– to balance the sound level of the Front Left and Right speakers.
- 38 SHUFFLE**  
– to play all the available discs and their tracks in random order.
- 39 DIGIT 0 – 9**  
(*numbers consisting of two figures must be keyed in within 2 seconds*)  
for CD ..... to key in a CD track for playback or programming.  
for TUNER ..... to key in a preset radio station.
- 40**   
– to switch the system to standby mode.

### Notes for remote control:

- **First select the source you wish to control by pressing one of the source select keys on the remote control (e.g. CD, TUNER, etc.).**
- **Then select the desired function (▶, ◀, ▶, etc.).**

## OPERATING THE SYSTEM

English



**Important:**  
Before you operate the system, complete the preparation procedures.

### Demonstration mode

The system has a demonstration mode that shows the various features offered by the system. **When the system is switched on for the first time, the demonstration mode will start automatically.**

Notes:

- During the demonstration, if you press any source (or standby-on) button, the system will switch to the respective mode (or standby).
- When the system is switched to standby or power save mode, the demonstration will resume 5 seconds later.

### To stop the demonstration mode

- Press and hold  (on the system only) for **5 seconds** when the system is in demonstration mode.
  - The demonstration will stop.
  - "DEMO OFF" is displayed.
  - The system will switch to standby mode.

Notes:

- When the system is switched on from the main power outlet, the CD carousel tray may open and close again to initialize the set.
- Even though the AC power cord is removed from and reconnected to the wall socket, the demonstration will remain off until it is switched on again.

### To start the demonstration mode

- Press and hold  (on the system only) for **5 seconds** when the system is in standby mode.
  - The demonstration will begin.

### Easy Set

EASY SET allows you to store all available radio stations and RDS stations automatically.

- 1 Press and hold **STANDBY ON** (on the system only) for **5 seconds**, when the system is in standby or demonstration mode.
  - "EASY SET" will be displayed, and followed by "TUNER" and then "AUTO".
  - EASY SET will start searching for all RDS radio stations with sufficient signal strength and then followed by radio stations on FM, MW and LW band respectively. Weak RDS radio stations may be stored in later presets.
  - All available RDS and radio stations with sufficient signal strength will be stored. Up to 40 presets may be stored.

- 2 The system will proceed to set the RDS time automatically with the stored RDS preset station.

- If no RDS station is available in the first preset station, the program will exit automatically.
  - After a radio station is found, "EASY SET" will be displayed and followed by "TIME".
- When searching RDS time;
  - "SEARCH RDS TIME" will be displayed.
  - When RDS time is read, "RDS TIME" will be displayed. The current time will be displayed for 2 seconds and stored automatically.

Notes:

- EASY SET will start with the RDS station, if there are still presets available, it will continue to store the FM, MW and LW bands respectively.
- When EASY SET is used, all previously stored radio stations will be replaced.
- The last preset radio station or the first available RDS station will appear on the display when EASY SET is completed.
- If RDS station does not transmit RDS time within 90 seconds, the program will exit automatically and the display will show "NO RDS TIME".

## OPERATING THE SYSTEM

English

### Switching the system ON

- Press **CD, TUNER, TAPE** or **AUX**.

You can also switch on the system by pressing any one of the CD DIRECT PLAY buttons.

### Switching the system to standby mode

- Press **STANDBY ON** or  $\text{⏻}$  on the remote control.  
→ The system will switch to standby mode.

### Switching the system to power save mode (when Demonstration mode is stopped)

- Press **POWER SAVE** to switch to energy saving mode (< 2 watts).  
→ "LOW POWER STANDBY ON" will be displayed, after which the display screen goes blank.  
→ The low power STANDBY ON LED will be lit.

Note:

- if the demonstration mode has not been disabled, it will resume 5 seconds later.

### Selecting the Source

- Press the respective source selection button: **CD, TUNER, TAPE** or **AUX**.  
→ The display indicates the selected source.

Note:

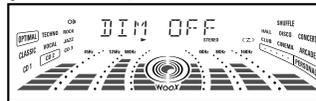
- For an external source, make sure you have connected the audio left and right OUT terminals of the external equipment (TV, VCR, Laser Disc player, DVD player or CD Recorder) to the AUX/CDR IN terminals.

### Dim mode

You can select the desired brightness for the display.

- Press **DIM** to select DIM 1, DIM 2, DIM 3 or DIM OFF display mode.  
→ The **DIM** appears on the display.  
→ "DIM 1", "DIM 2", "DIM 3" or "DIM OFF" will be displayed depending on the mode selected.

### DIM OFF - normal brightness with Spectrum Analyzer On



### DIM 1 - normal brightness with Spectrum Analyzer Off



### DIM 2 - half brightness with Spectrum Analyzer On



### DIM 3 - half brightness with Spectrum Analyzer Off and all LEDs on the system will be switched off.



### Volume Control

Adjust **VOLUME** to increase or decrease the sound level.

For Personal Listening

Connect the headphones plug to the  $\text{Ⓜ}$  socket at the front of the system. The speakers will be muted.

### Sound Control

For Optimal sound listening, you can only select one of the following sound control at a time : **PERSONAL, DSC, VEC** or **BASS/TREBLE**.

### PERSONAL SOUND

You can store upto 6 personal settings.

- 1 Press to select the **PERSONAL** feature.
- 2 Adjust the **JOG** to select the desired Personal setting.  
→ The selected personal setting number will be encircled.  
→ If no name has been stored previously, "PERSONAL x" will be displayed. "x" is the setting number.

## OPERATING THE SYSTEM

English

### Personal Setting

You can adjust the personal setting to your desired level with the JOG control.

- 1 Press and hold **PERSONAL** for about **5 seconds** to switch on the personal setting mode.  
→ "SELECT PRESET NUMBER" will be displayed.
- 2 Adjust the **JOG** to select the desired preset number for personal setting and press **▶▶** to confirm the selection.  
→ "ADAPT LOW FREQ LEVEL" will be displayed.
- 3 Adjust the **JOG** to select the desired Spectrum Analyzer band level for low frequency.  
→ The level will increase or decrease between **+3** and **-3**.
- 4 Press **▶▶** to confirm the selection.  
→ "ADAPT MID FREQ LEVEL" will be displayed and the next followed by "ADAPT HIGH FREQ LEVEL".
  - Repeat **step 3 - 4** to select the desired mid and high frequencies Spectrum Analyzer band levels.
- 5 You can choose to edit the name for the personal setting.  
→ The first character of setting name will be flashing.

- 6 Adjust the **JOG** to select the desired alphabet, number or symbol.  
→ "A to Z", "0 to 9" or "\*, -, +, \, /, \_".
- 7 Press **▶▶** to confirm the selection.  
→ The next character for editing will be flashing.
  - Repeat **step 6 - 7** to store up to 10 characters.
- 8 To store the setting, press **PERSONAL** again.
  - **Before storing the setting, you can press ◀◀ to retrace the steps in the reverse order.**
  - **To exit without storing the setting, press ■ .**

#### Notes:

- During personal setting, if no button is pressed within 90 seconds, the system will exit personal setting mode automatically.
- w00x level cannot be stored as part of the personal setting.
- It is not possible to adjust Bass/Treble level during personal setting, "USE JOG" will be displayed.

### DIGITAL SOUND CONTROL (DSC)

The DSC feature enables you to adjust the system to suit your type of music.

- 1 Press to select the **DSC** feature.
- 2 Adjust the **JOG** to select the desired Digital Sound Control setting : OPTIMAL, CLASSIC, TECHNO, VOCAL, ROCK or JAZZ.  
→ The selected digital sound is encircled.  
→ "OPTIMAL, CLASSIC, TECHNO, VOCAL, ROCK or JAZZ" will be displayed.

#### Note:

- For neutral setting, select CLASSIC.

### VIRTUAL ENVIRONMENT CONTROL (VEC)

The VEC feature enables you to adjust the system to select a type of environment.

- 1 Press to select the **VEC** feature.
- 2 Adjust the **JOG** to select the desired Virtual Environment Control setting : HALL, CLUB, DISCO, CINEMA, CONCERT or ARCADE.  
→ The selected environment is encircled.  
→ "HALL, CLUB, DISCO, CINEMA, CONCERT or ARCADE" will be displayed.

### BASS/TREBLE

The BASS/TREBLE features enable you to define the sound processor settings for Bass and Treble.

- 1 Press to select the **BASS/TREBLE** feature.  
→ The BASS and TREBLE LED will be lit.  
→ "ADAPT BASS AND TREBLE LEVELS" will be displayed.
- 2 Use BASS/TREBLE CONTROL to select the desired BASS or TREBLE level respectively.  
→ The BASS/TREBLE level will increase or decrease between level **+3** and **-3**.
  - Press **BASS ▲** or **▼** to select the low tone level.  
→ "BASS -x or BASS +x" will be displayed.
  - Press **TREBLE ▲** or **▼** to select the high tone level.  
→ "TREBLE -x or TREBLE +x" will be displayed.

#### Note:

- "x" denotes the sound level.



## OPERATING THE SYSTEM

English

### w00x

There are three w00x settings to enhance the bass response.

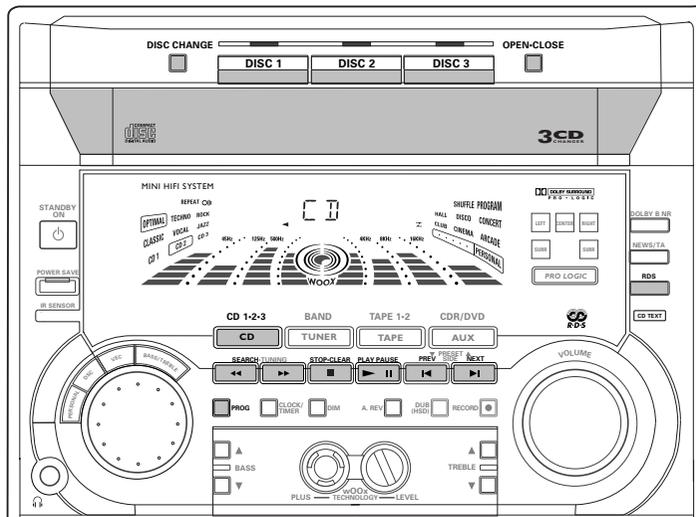
- 1 Press **w00x PLUS** (or **w00x** on the remote control) to select between normal or enhanced w00x effect.
  - When normal w00x sound effect is selected;
    - The **w00x** display is switched off.
    - "w00x NORM" will be displayed.
  - When enhanced w00x sound effect is selected;
    - The **w00x** appears on the display.
- 2 Adjust **w00x LEVEL** to select the desired levels of w00x.
  - The **w00x** display lights up.
  - "w00x 1, w00x 2 or w00x 3" will be displayed.

#### Notes:

- When Personal or Bass/Treble sound control is selected, w00x will be switched off automatically.
- Some CDs or tapes might be recorded in high modulation. It may cause distortion at high volume. If this occurs, switch off w00x or reduce the volume.

### Automatic DSC-w00x / VEC-w00x selection

The best w00x setting is generated automatically for each DSC or VEC selection. You can manually select the w00x setting that best suits your listening environment.



### Warning!

- 1) **This system is designed for conventional CDs. Do not use any accessories such as 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 CDs, do not turn over or shake the system. This may jam the changer.**

**You may load three discs in the CD changer for continuous playback without interruption.**

### CD Text

It will enable you to know which album and its track you are selecting or playing on specially encoded CD.

- Press **RDS** (CD TEXT).
  - At stop mode**
    - The title of album or total playing time will be displayed.
  - During Playback**
    - The title of album, track title or elapsed time will be displayed.
- If the album and track title are not known.
  - "NO TEXT ON DISC" will be displayed.

### Discs for playback

This system can play all digital audio CD, finalized digital audio CD-Recordable and finalized digital audio CD-Rewritable format discs.



### Loading the CD Changer

- 1 Press **CD** to select CD mode.
- 2 Press **OPEN•CLOSE**.
  - The CD carousel tray 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 **DISC CHANGE** button.
    - The CD carousel will rotate until the empty tray is ready for loading.
- 4 Press **OPEN•CLOSE** to close the CD carousel tray.
  - The total number of tracks and the playing time of the selected disc appear on the display.

#### Note:

- To ensure good system performance, wait until the CD changer completely reads the disc(s) before proceeding.

### CD Direct Play

- You can play a CD directly by pressing the **DISC 1**, **DISC 2** or **DISC 3** button. The CD player will stop at the end of playback of the selected disc.
  - A lit button indicates that a disc is loaded in the disc tray.
  - The selected disc is encircled.

## CD

English

### Playing a CD

- 1 Press **PLAY ►** to start playback.
  - The disc tray, track number and elapsed playing time of the current track appear on the display.
- To interrupt playback, press **PAUSE ►**.
  - The playing time flashes.
- To resume playback, press **PLAY ►** again.
- 2 To stop playback, press **■**.

#### Notes:

- All the available discs will play once, then stop.
- When the CD has stopped playing, the system will switch to standby mode after 30 minutes if no button is pressed.

### Disc Change

You can change the outer two discs while the third inner disc is stopped or is playing.

- 1 Press **DISC CHANGE**.
  - The CD carousel tray slides out.
- 2 Replace the discs in the left and right disc trays.
  - If you wish to change the inner disc during playback, press **DISC CHANGE** again.
    - "DISC CHANGE" will be displayed.
    - The CD will stop playing.
    - The CD carousel tray will close to retrieve the inner CD and then open again with the inner CD accessible.
- 3 Press **OPEN•CLOSE** to close the CD carousel tray.

### Selecting a desired track

#### Selecting a desired track when playback is stopped

- 1 Press **◀** or **▶** (or *Digit 0-9* on the remote control) until the desired track appears on the display.
- 2 Press **PLAY ►** to start playback.
  - The selected track number and elapsed playing time appear on the display.

#### Selecting a desired track during playback

- Press **◀** or **▶** (or *Digit 0-9* 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.

#### Note:

- Pressing **◀** during shuffling can only skip to the beginning of the current track.

#### Searching for a particular passage during playback

- Press and hold **◀◀** or **▶▶** until the desired passage is located.
  - The volume will be reduced.
- Play returns to normal when **◀◀** or **▶▶** is released.

### Programming Tracks

Programming tracks of a loaded CD is possible when playback is stopped. 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 **PROG** to start programming.
  - The **PROGRAM** starts flashing.
  - It will cancel any previously selected repeat mode.
- 3 Press the **CD** (CD 1•2•3) or **DISC 1/2/3** button to select the disc.
- 4 Press **◀** or **▶** (or *Digit 0-9* on the remote control) to select the desired track.
- 5 Press **PROG** to store the track.
  - Repeat steps 3 to 5 to store other discs and tracks.
- 6 Press **■** once to end programming.
  - The total number of tracks programmed and total playing time appear on the display.

#### Notes:

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



CD

English

- If the system is reading the disc, programming is not possible, "REMAINING" will be displayed and followed by "DISC X". "X" is the current read disc number.
- During programming, if no button is pressed within 20 seconds, the system will exit program mode automatically.

### Reviewing the program

Reviewing of the program is possible only when playback is stopped.

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

### Playing the program

- 1 Press **PLAY ▶ II** to start program playback.
  - "PLAY PROGRAM" will be displayed.
  - The track number and elapsed playing time of the current track will appear on the display.
- If you press **REPEAT** during program playback, the current track or all programmed tracks will be played repeatedly.
  - "TRACK" or "PROGRAM" will be displayed.
  - The **REPEAT** and **PROGRAM** appear on the display.
- 2 Press **■** to stop program playback.

Notes:

- If you press any of the CD DIRECT PLAY buttons, the system will play the selected disc or track and the stored program will be ignored temporarily. The **PROGRAM** display also will disappear temporarily from the display. It will reappear when playback of the selected disc ends.
- **REPEAT DISC** mode is not available when program playback begins.

### Erasing the program (when playback is stopped)

- Press **■**.
  - "PROGRAM CLEARED" will be displayed.

Note:

- The program will be erased when the system is disconnected from the power supply or when the CD carousel tray is opened.

### Shuffle (only on remote control)

In shuffle mode, the system plays all the available discs and their tracks in random order. Shuffle may be used also when tracks are programmed.

#### To shuffle all the discs and tracks

- 1 Press **SHUFFLE**.
  - "SHUFFLE" will be displayed.
  - The **SHUFFLE**, the disc and the track selected at random appear on the display.
- The discs and the tracks will be played in random order until you press **■**.
- If you press **REPEAT** during shuffling, the current track or all available discs will be played repeatedly.
  - "TRACK" or "ALL DISC" will be displayed.
  - The **REPEAT** and **SHUFFLE** appear on the display.
- 2 Press **SHUFFLE** again to resume normal playback.
  - The **SHUFFLE** disappears from the display.

Note:

- **REPEAT DISC** mode is not available when shuffle is selected.

### Repeat (only on remote control)

You can play the current track, a disc or all available discs repeatedly.

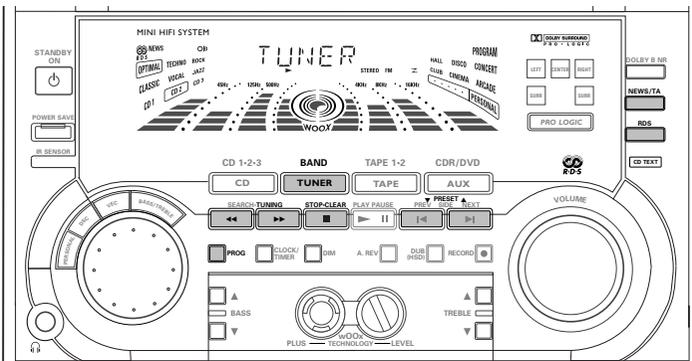
- 1 Press **REPEAT** on the remote control to select the various repeat modes.
  - "TRACK", "DISC", "ALL DISC" or "OFF" will be displayed.
  - The **REPEAT** appears on the display.
- The selected track, selected disc or all available discs will now be played repeatedly until you press **■**.
- 2 Press **REPEAT** until the "OFF" mode is displayed to resume normal playback.
  - The **REPEAT** disappears from the display.

Notes:

- **REPEAT DISC** mode is not available during program play or shuffle mode.
- You can also repeat shuffling a program.
  - "TRACK" or "PROGRAM" will be displayed.
  - The **REPEAT**, **PROGRAM** and **SHUFFLE** appear on the display.

## TUNER

English



### Note:

- For 'EASY SET' feature, please refer to page 13.

### Tuning to radio stations

- Press **TUNER** (BAND) to select TUNER mode.  
→ "TUNER" will be displayed.  
A few seconds later, the current radio frequency will be displayed.
- Press **TUNER** (BAND) again to select the desired waveband : FM, MW or LW.
- Press **◀◀** or **▶▶** for more than one second, then release.  
→ The display will show "SEARCH" until a radio station with sufficient signal strength is found.

- Repeat this procedure until the desired station is reached.
- To tune to a weak station, briefly press **◀◀** or **▶▶** repeatedly until the display shows the desired frequency and/or when the best reception has been obtained.

### Storing Preset Stations

You can store up to 40 radio stations in the memory. When a preset radio station is selected, the preset number appears next to the frequency on the display.

### Automatic programming

- Press **TUNER** (BAND).
- Press **PROG** for more than one second.  
→ The **PROGRAM** starts flashing and "AUTO" will be displayed.

- The system will start searching for all radio stations with RDS and then followed by radio stations on FM, MW and LW band respectively.
- All available stations will be stored automatically. The frequency and preset number will be displayed briefly.
- The system will stop searching when all the available radio stations are stored or when the memory for 40 preset radio stations is used.
- The system will remain tuned to the last stored preset radio station.

### Notes:

- You can cancel the automatic programming by pressing **PROG** or **■** (on the system only).
- If you want to reserve a section of preset numbers, for example preset numbers 1 to 9, select preset 10 before starting automatic programming, only the preset numbers 10 to 40 will be programmed.

### Manual programming

- Press **TUNER** (BAND).
- Press **TUNER** (BAND) again to select the desired waveband : FM, MW or LW.
- Press **PROG** for less than one second.  
→ The **PROGRAM** starts flashing.  
→ The next available preset number will be displayed for selection.

- Press **◀◀** or **▶▶** to tune to the desired frequency.
- If you wish to store the radio station to another preset number, press **▼** or **▲** (or **Digit 0-9** on the remote control) to select the desired preset number.
- Press **PROG** again.  
→ The **PROGRAM** disappears and the radio station will be stored.

- Repeat **steps 3 – 5** to store other preset radio stations.

### Notes:

- When 40 radio stations are stored and you attempt to store another radio station, the display will show "PROGRAM FULL". If you want to change an existing preset number, repeat steps 3 – 5.
- You can cancel manual programming by pressing **■** (on the system only).
- During programming, if no button is pressed within 20 seconds, the system will exit program mode automatically.

### Tuning to Preset Radio Stations

- Press **▼** or **▲** (or **Digit 0-9** on the remote control) to select the desired preset number.  
→ The preset number, radio frequency, and waveband appear on the display.



### Receiving RDS Radio Station



RDS (Radio Data System) is a broadcasting service that allows FM stations to send additional information along with the regular FM radio signal. This additional information can contain:

- **STATION NAME:** The radio station name is displayed.
- **PROGRAM TYPE:** The following program types exist and can be received by your tuner: News, Affairs, Info, Sport, Educate, Drama, Culture, Science, Varied, Pop M, Rock M, M.O.R. (middle of the road music), Light M, Classics, Other M, No type.
- **RADIO TEXT (RT):** text messages appear in the display.

When you have tuned to a RDS station, the RDS logo (RDS) and the radio station name will appear on the display:

- The display normally shows the radio station name if available. By repeatedly pressing **RDS** button you can change the type of display information:
  - The display shows in turn: STATION NAME → PROGRAM TYPE → RADIO TEXT → TUNED FREQUENCY → STATION NAME ...

*Note:*

- When you press the **RDS** button and the display shows "NO RDS", it indicates that either the tuned station is not transmitting RDS signal or it is a non RDS station.

#### RDS Clock

Some RDS station may be transmitting a real clock time at an interval of every minute.

#### Setting the time with RDS clock

- 1 Press **CLOCK/TIMER**.  
→ " - : - - " or current time appears on the display.
- 2 Press **CLOCK/TIMER** once more to enter clock setting mode.  
→ "00:00" or current time starts flashing.
- 3 Press **RDS**.
  - The message "SEARCH RDS TIME" will be displayed.
  - If the station does not transmit RDS clock, "NO RDS TIME" will be displayed.
  - When the RDS clock is read, "RDS TIME" will be displayed. The current clock time is displayed for 2 seconds and will be stored automatically.
  - If within 90 seconds, the RDS time is not detected, "NO RDS TIME" will be displayed.

*Note:*

- Some RDS station may be transmitting a real time clock at a minute interval. The accuracy of the transmitted time depends on the transmitting RDS station.

#### NEWS/TA (Traffic Announcement) (only available in Radio Station with RDS)

You can activate NEWS or TA function in Standby, Demonstration or any source mode except Tuner mode. Once the News Program Type (for NEWS function) or Traffic Announcement data (for TA function) is detected in any of the selected RDS stations, it will switch to TUNER mode automatically.

NEWS/TA key toggles in the following sequence :

**NEWS → TA → OFF → NEWS**

#### To start NEWS or TA function

- 1 Press **NEWS/TA** to select NEWS function.
  - The **NEWS** and "NEWS" will be displayed.
- If you want to select TA function, press **NEWS/TA** again.
  - The **TA** and "TR" will be displayed.

#### 2 When NEWS or TA is selected;

- It will scan stations stored in the first 5 preset and wait for the News Program Type / Traffic Announcement data to be available in any of these RDS stations. During the search :
  - The current source activity will remain uninterrupted.
  - If no RDS station is found in the first 5 presets, the NEWS/TA function will be switched off. The display will show "NO RDS NEWS" or "NO RDS TR" and **NEWS** or **TA** will disappear from the display.
- When NEWS/TA transmission is detected, the system will switch to Tuner mode.
  - The **NEWS** or **TA** starts flashing.

#### To cancel NEWS or TA function

- Press **NEWS/TA** until the **NEWS** or **TA** disappears and "TR OFF" is displayed.

*Notes:*

- If you are listening to a non RDS TUNER radio station and should you decide to hear NEWS or TA, first select other source (e.g. CD, TAPE or AUX), then press NEWS/TA.
- Before using the NEWS or TA feature, ensure that the first 5 presets are RDS stations.
- The NEWS/TA works only once for each activation.

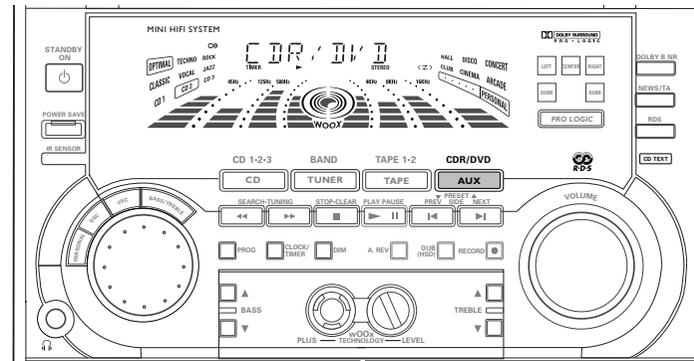


## TUNER

English

- During News bulletin or Traffic Announcement, you can press any available source or Tuner function keys to cancel NEWS/TA function and execute the relevant source mode.
- If set is switched to Tuner source, the NEWS/TA function will be cancelled, "NEWS OFF" or "TR OFF" will be displayed immediately after the "TUNER" message.

## AUX/CDR



### Selecting External Equipment

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

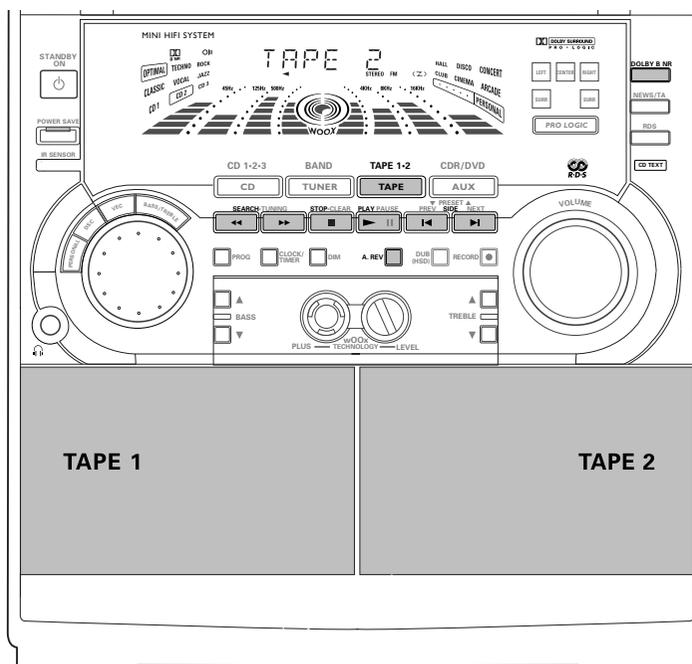
- 1 Press **AUX** (CDR/DVD) to select the CDR/DVD mode.  
→ "CDR/DVD" will be displayed.
- 2 Press **AUX** (CDR/DVD) again to select external (normal AUX) mode.  
→ "AUX" will be displayed.

### Notes:

- There are two Auxiliary modes:
  - i. the normal AUX mode.
  - ii. the CDR mode, where the LINE OUT of this mini system is muted. You will not be able to record or listen to the sound from the LINE OUT.
- You are advised not to listen to and record from the same source simultaneously.
- All the sound control features (e.g. DSC, wOx, etc.) are available for selection.

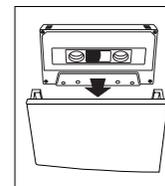
## TAPE

English



### Loading a tape

- 1 Press on the tape deck to open the tape deck door.
- 2 The tape deck door opens.
- 3 Load the tape with the open side downward and the full spool to the left.



- 4 Close the tape deck door.

### Tape Side (only on tape deck 2)

- Press ◀ or ▶ to select the tape side for playback or recording.
  - The ◀ (BACK) or ▶ (FRONT) appear on the display, depending on the tape side selected.
  - "T2 <<<" or "T2 >>>" will be displayed.
  - When recording, the ◀ or ▶ display will be flashing.

### Auto Reverse Playback (only on tape deck 2)

- Press **A. REV** to select the different playback modes.
  - ◄ ..... to record or playback on one side of the tape. The tape stops at the end of one side.
  - ◄ ◄ ..... to record or playback on both sides of the tape. The tape then stops.
  - ◄ ◄ ◄ ..... to playback continuously on both sides of the tape up to a maximum of 10 times per side unless you press ■.

### Tape Playback

- 1 Press **TAPE (TAPE 1•2)** to select TAPE mode.
  - "TAPE 1" or "TAPE 2" will be displayed, and followed by "T 1" or "T 2" with "<<<" or ">>>".
- Press **TAPE (TAPE 1•2)** again to select either tape deck 1 or tape deck 2.
- 2 Load the tape into the desired tape deck.
- 3 Press **PLAY ▶ II** to start playback.
  - If tape 1 is selected for playback;
    - "T 1" with ">" scrolling right will be displayed.
  - If tape 2 is selected for playback;
    - "T 2" with "<" or ">" scrolling left or right will be displayed depending on the tape side selected.

## TAPE

English

### 3a (for playback on tape deck 2 only)

- Press ◀ or ▶ to select tape side (see *Tape Side*).
- Press **A. REV** to select the different type of playback mode (see *Auto Reverse Playback*).
- 4 Press ■ to end playback.  
→ "T I or T2" with "<< or >>" will be displayed.

#### Note:

- When the tape has stopped playing, the system will switch to standby mode after 30 minutes if no button is pressed.

### Rewind/Fast Forward

#### When playback is stopped

- 1 You can rewind or fast forward the tape by pressing ◀◀ or ▶▶ respectively.  
→ If rewinding, "T I < or T2 <" with "<" scrolling left will be displayed.  
→ If fast forwarding, "T I > or T2 >" with ">" scrolling right will be displayed  
→ The tape will stop automatically at the end of the rewinding or fast forwarding.
- 2 Press ■ to stop rewinding or fast forwarding.

### During playback

- Press and hold ◀◀ or ▶▶ until the desired passage is located.  
→ "T I or T2" with "< < or > >" scrolling left or right will be displayed depending on which button is pressed.  
→ During searching, the sound is reduced to a low volume.  
→ When you release ◀◀ or ▶▶, the tape continues playing.

#### Notes:

- During rewinding or fast forwarding of a tape, it is also possible to select another source (e.g. CD, TUNER, or AUX).
- Before playing a tape, check and tighten slack tape with a pencil. Slack tape may get jammed or may burst in the mechanism.
- C-120 tape is extremely thin and is easily deformed or damaged. It is not recommended for use in this system.
- Store the tapes at room temperature and do not put them too close to a magnetic field (for example, a transformer, TV, or speaker).

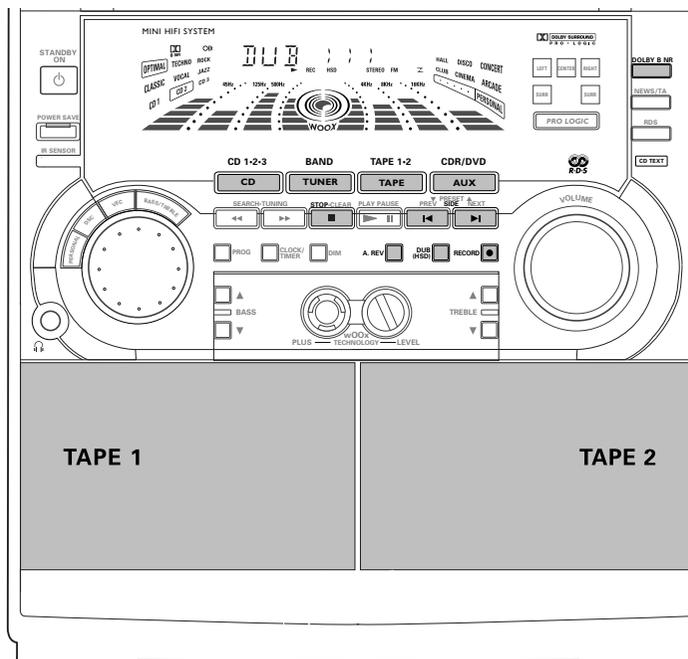
### Dolby B Noise Reduction System

- 1 Press **DOLBY B NR** to switch on Dolby B NR.  
→ The □□ B NR appears in the display.
- 2 Press **DOLBY B NR** again to switch off Dolby B NR.  
→ The □□ B NR disappears from the display.

#### Note:

- A tape recorded with the Dolby B NR system should also be played in the Dolby B NR mode. If you forget to operate the DOLBY B NR button, the treble may be reproduced too strongly.

## RECORDING



### SWITCH OFF DOLBY PRO LOGIC WHEN RECORDING

#### Notes:

- It is not possible to change tape side during recording.
- For recording, use only tape of IEC type I (normal tape) or IEC type II (CrO<sub>2</sub>).
- The tape is secured at both ends with leader tape. At the beginning and end of tape, nothing will be recorded for six to seven seconds.
- The recording level is set automatically, regardless of the position of Volume, wOOx, DSC, etc. Dolby B NR can be selected for Tuner or CD recording.
- To prevent accidental recording, break out the tab on the left shoulder of the tape side you want to protect.
- If "CHECK TAPE" is displayed, the protection tab has been broken. Put a piece of clear adhesive tape over the opening. Do not cover the CrO<sub>2</sub> tape detection hole when covering the tab opening.

### Recording from other sources

(only on tape deck 2)

- 1 Press **TAPE** ( TAPE 1•2 ) to select tape deck 2.
- 2 Load a blank tape into tape deck 2 with the open side downward.
- 3 Press **◀** or **▶** to select the recording tape side (see *Tape Side* under **TAPE** section).
- 4 Press **DOLBY B NR** to record with Dolby B NR.
- 5 Press **CD, TUNER** or **AUX**.
  - Start playback of the selected source.
- 6 Press **RECORD** to start recording.
  - The **REC** starts flashing.
- 7 Press **■** to stop recording.

#### Notes:

- Only **◀** or **▶** mode is available during recording.
- During recording, it is not possible to listen to another source.

English

## RECORDING

English

### Dubbing tapes (from tape deck 1 to tape deck 2)

- 1 Press **TAPE** ( TAPE 1•2 ) to select tape deck 2.
- 2 Load the prerecorded tape into tape deck 1 with full spool to the left and a blank tape into tape deck 2 with full spool aside.
- 3 Press **◀** or **▶** to select the recording tape side (see *Tape Side* under **TAPE** section).
- 4 Press **DUB (HSD) once** for normal speed dubbing or **twice** (within 2 seconds) for high speed dubbing.  
→ "NORMAL" (normal speed) or "FAST" (high speed) will be displayed, followed by "DUB" with "<" or ">" scrolling left or right depending on the tape side selected.  
→ The **HSD** appears on the display during high speed dubbing.
- Dubbing will start immediately.  
→ The **REC** starts flashing.
- 5 Press **■** to stop dubbing.

#### Notes:

- Only **■** mode is available during dubbing.
- At the end of side A, flip the tapes to side B and repeat the procedure.
- Dubbing of tapes is only possible from tape deck 1 to tape deck 2.
- To ensure good dubbing, use tapes of the same length.

- During high speed dubbing in *Tape mode*, the sound is reduced to a low volume.
- You can listen to another source while dubbing.
- *Dolby B NR* button has no influence during dubbing (dubbing from tape deck 1 to tape deck 2). An original tape recorded with *Dolby B NR* automatically produces a copy with *Dolby B NR*.

### CD Synchro Start Recording

- 1 Load a blank tape into tape deck 2 and a disc into a disc tray.
- 2 Press **CD** to select CD mode.
  - You can program the tracks in the order you want them to be recorded (see Programming Tracks). If not, select the disc by pressing **CD** (CD 1•2•3) and the tracks are recorded according to the order on the selected disc.
- 3 Press **RECORD** to start recording.  
→ The **REC** starts flashing.
  - CD will start playback automatically.
- 4 Press **■** to stop recording.

### One Touch Recording

- For One Touch Recording, as soon as you press **RECORD**, the current source (CD, TUNER or AUX) will be recorded on tape deck 2.
- 1 Load a blank tape in tape deck 2.
  - 2 Press **RECORD** to start recording.  
→ The **REC** starts flashing.
  - 3 Press **■** to stop recording.

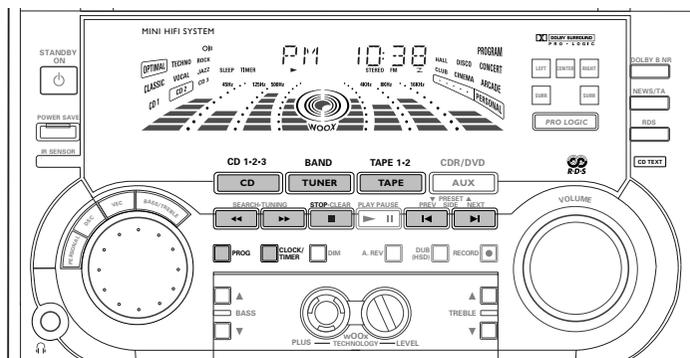
#### Note:

- When you press **RECORD** while in *TAPE mode*, "SELECT SOURCE" will be displayed. One Touch Recording is not possible in *TAPE mode*.

### Digital Recording via Digital Out

For CD digital recording, please refer to the *Instructions Manual of the CD Recorder, digital audio equipment, etc.*

## CLOCK



### View Clock

You can view the clock (if it is set) if the system is in Standby mode or when any sound source is selected (CD, TUNER, etc.). The clock will be displayed for about 7 seconds.

- Press **CLOCK/TIMER** briefly (or **CLOCK** on the remote control).  
→ "PM 10:38" or "22:38" (the current time) will be displayed depending on whether you have selected 12- or 24-hour mode.  
→ " - : - : - " will be displayed if the clock is not set.

Note:

- When the system goes into low power standby mode, the clock setting will not be displayed.

### Clock Setting

The clock can be set in either 12- or 24-hour mode, e.g. "PM 12:00" or "00:00". Before setting the clock, you must be in the View Clock mode.

- 1 Press **CLOCK/TIMER** to select clock mode.
- 2 Press **PROG** (on the system only) to select 12- and 24-hour mode.  
→ If 12-hour mode is selected, "PM 12:00" starts flashing.  
→ If 24-hour mode is selected, "00:00" starts flashing.
- 3 Set the hour with **◀** or **▶** on the system.
- 4 Set the minute with **◀** or **▶** on the system.

## TIMER

### Timer Setting

- The system can switch on to CD, TUNER, or TAPE 2 mode automatically at a preset time. It can serve as an alarm to wake you up.
- Before setting the timer, make sure the clock is set correctly.
- The timer will always be switched on once it is set.
- **The volume of the timer will increase from the minimum level until the volume level before the set is switched to standby mode.**

- 1 Press and hold **CLOCK/TIMER** for more than **2 seconds** to select timer mode.  
→ "PM 12:00" or "00:00" or the last timer setting starts flashing depending on whether you have selected 12- or 24-hour mode.  
→ The **TIMER** starts flashing.  
→ The selected source is lit while other available sources are flashing.
- 2 Press **CD**, **TUNER** or **TAPE** to select the desired source.
  - Before selecting CD or TAPE, make sure a CD or tape is loaded in the CD tray or tape deck 2.
- 3 Press **◀** or **▶** on the system to set the hour for the timer to start.
- 4 Press **◀** or **▶** on the system to set the minute for the timer to start.

English

## TIMER

English

- 5** Press **CLOCK/TIMER** to store the start time.
- The timer is now set.
  - The **TIMER** remains on the display.
  - At the preset time, the timer will be activated.
    - The selected source will be played.

### Notes:

- During timer setting, if no button is pressed within 90 seconds, the system will exit timer setting mode automatically.
- If the source selected is **TUNER**, the last tuned frequency will be switched on.
- If the source selected is **CD**, playback will begin with the first track of the selected disc or program. If the **CD** trays are empty, **TUNER** will be selected instead.
- If the source selected is **TAPE**, and if the preset time is reached during high speed dubbing, the **TUNER** will be selected instead.
- The timer will not activate if a recording is in progress.

### To switch off the TIMER

- Press **TIMER ON/OFF** on the remote control.
  - The timer is now switched off.
  - The display will show "CANCEL" and the **TIMER** disappears.

### To start the TIMER again (for the same preset time and source)

- Press **TIMER ON/OFF** on the remote control.
  - The timer is now on.
  - The **TIMER** appears on the display.

## SLEEP TIMER

### Sleep (only on remote control)

This feature allows you to select a length of time after which the system will switch to the standby mode automatically.

- 1** Press **SLEEP** on the remote control repeatedly to select a period of time.
- The selections are as follows (time in minutes):  
60 → 45 → 30 → 15 → OFF  
→ 60 ...
  - "SLEEP xx" or "OFF" will be displayed. "xx" is the time in minutes.
- 2** When you reach the desired length of time, stop pressing the **SLEEP** button.
- After this amount of time passes, the system will switch to the standby mode.

### To switch off the Sleep Timer

- Press **SLEEP** repeatedly until "OFF" is displayed, or press the **STANDBY ON** button.

## SPECIFICATIONS

English

### Specifications

#### AMPLIFIER

Output power	
DPL Mode	
Left/Right Channel ..	2 x 160 W MPO / 2 x 80 RMS <sup>(1)</sup>
Center Channel .....	80 W MPO / 40 W RMS, 12 Ω
Surround Channel .....	2 x 40 W MPO /
.....	2 x 20 W RMS, 6 Ω
Stereo Mode .....	2 x 160 W MPO / 2 x 80 RMS <sup>(1)</sup>
Signal-to-noise ratio .....	≥ 75 dBA (IEC)
Frequency response .....	40 – 20000 Hz, ± 3 dB
Input sensitivity	
AUX In / CDR/DVD In .....	500 mV / 1V
Output	
Speakers .....	≥ 6 Ω
Center Speakers .....	≥ 12 Ω
Surround Speakers .....	≥ 6 Ω
Headphones .....	32 Ω – 1000 Ω
Subwoofer Out .....	1.5 V ±2dB, > 22000 Ω
Line Out .....	500 mV ±2dB, > 22000 Ω
Digital Out .....	IEC 958, 44.1 kHz
Surround Out ( <i>wireless</i> ) .....	350 mV

<sup>(1)</sup> (6 Ω, 1 kHz, 10% THD)

#### CD PLAYER

Number of programmable tracks .....	40
Frequency response .....	40 – 20000 Hz
Signal-to-noise ratio .....	≥ 76 dBA
Channel separation .....	≥ 79 dB (1 kHz)
Total harmonic distortion .....	< 0.02% (1 kHz)

#### TUNER

FM wave range .....	87.5 – 108 MHz
MW wave range .....	531 – 1602 kHz
LW wave range .....	153 – 279 kHz
Number of presets .....	40
Antenna	
FM .....	75 Ω wire
AM .....	Loop antenna

#### TAPE DECK

Frequency response	
CrO <sub>2</sub> tape (type II) .....	60 – 15000 Hz (5 dB)
Normal tape (type I) .....	60 – 15000 Hz (5 dB)
Signal-to-noise ratio ( <i>without Dolby B NR</i> )	
CrO <sub>2</sub> tape (type II) .....	≥ 50 dBA
Normal tape (type I) .....	≥ 47 dBA
Signal-to-noise ratio ( <i>with Dolby B NR</i> )	
CrO <sub>2</sub> tape (type II) .....	≥ 62 dBA
Normal tape (type I) .....	≥ 58 dBA
Wow and flutter .....	≤ 0.4% DIN

#### SPEAKERS

System .....	Shielded 2-way; top firing w00x and Bass reflex system
Impedance .....	6 Ω
w00x .....	1 x 6.5" top firing w00x driver
Woofer .....	1 x 6.5" full range
Tweeter .....	1 x 2.5" Ferrofluid
Dimensions (w x h x d) .....	240 x 345 x 290 (mm)
Weight .....	4.3 kg each

#### CENTER SPEAKER

System .....	shielded bass reflex
Impedance .....	12 Ω
Speaker Driver .....	1 x 3" full range
Dimensions (w x h x d) .....	260 x 140 x 240 (mm)
Weight .....	1.5 kg

#### SURROUND SPEAKERS

System .....	closed satellite
Impedance .....	6 Ω
Speaker Driver .....	1 x 3" full range
Dimensions (w x h x d) .....	234 x 103 x 224 (mm)
Weight .....	0.85 kg each

#### GENERAL INFORMATION

Material/finish .....	Polystyrene/Metal
AC Power .....	220 – 230 V / 50 Hz
Power Consumption	
Active .....	130 W
Standby .....	< 20 W
Standby (energy saving mode) .....	< 2 W
Dimensions (w x h x d) .....	265 x 310 x 390 (mm)
Weight (without speakers) .....	9.7 kg

#### Subject to modification

## MAINTENANCE

English

### 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 abrasives.

#### 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 benzine, thinner, commercially available cleaners, or antistatic spray intended for analog records.



#### Cleaning the CD lens

- After prolonged use, dirt or dust may accumulate at the CD lens. To ensure good playback quality, clean the CD lens with Philips CD Lens Cleaner or any commercially available cleaner. Follow the instructions supplied with cleaner.

#### Cleaning the Heads and the Tape Paths

- To ensure good recording and playback quality, clean the heads, the capstan(s), and pressure roller(s) after every 50 hours of tape operation.
- Use a cotton swab slightly moistened with cleaning fluid or alcohol.
- You can also clean the heads by playing a cleaning tape once.

#### Demagnetizing the heads

- Use a demagnetizing tape available at your dealer.

## TROUBLESHOOTING

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

### CD Player Operation

#### "NO DISC" is displayed.

- The disc is inserted upside down.  
→ *Place CD with printed side up.*
- Moisture condensation at the lens.  
→ *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.  
→ *Clean or replace the CD.*
- The CD lens is dirty or dusty.  
→ *See section under Maintenance (page 30).*

**"DISC NOT FINALIZED" is displayed.**

- The CD-RW or CD-R disc is not properly recorded for use with a standard CD player.  
→ *Read the instruction booklet of your CD-Rewritable or CD-Recorder on how to finalize a recording.*
- The CD is badly scratched or dirty.  
→ *Replace or clean CD.*

### Radio Reception

#### Poor radio reception.

- The signal is too weak.  
→ *Adjust the antenna.*  
→ *Connect an external antenna for better reception.*
- The TV or VCR is too close to the stereo system.  
→ *Separate the stereo system from the TV or VCR.*

#### "NO RDS TEXT" is displayed.

- RDS text message is not available.  
→ *Select another RDS station.*

**Tape Deck Operation****Recording or playback cannot be made or there is a decrease in audio level.**

- Dirty tape heads, capstans or pressure rollers.
- See section on tape deck maintenance (page 30).
- Magnetic build-up in the record/playback head.
- Use demagnetizing tape.

**Tape deck door cannot open.**

- Power failure or AC power plug disconnect from the wall outlet during tape playback.
- Reconnect the AC power plug and switch on the system again.

**Recorded material sounds strange.**

- Tape was recorded in one of the Dolby Pro Logic modes.
- Switch off Dolby Pro Logic mode when recording.

**General****System does not react when any button is pressed.**

- Electrostatic discharge.
- Press **STANDBY ON** to switch the system off. Remove the AC power plug from the wall outlet, then reconnect the power plug and switch on the system 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 the stripped speaker wire is clamped.

**Reversed left and right sound.**

- Speakers are connected wrongly.
- Check the speaker connections and location.

**Lack of bass sound or apparently imprecise physical location of musical instruments.**

- Speakers are connected wrongly.
- Check the speaker connection for proper phasing, colored/black wires to colored/black terminals.

**Remote control has no effect on the system.**

- Wrong source is selected.
- Select the source (**CD**, **TUNER**, etc.) before pressing the function button (**▶**, **◀**, **▶I**, etc.).
- The distance to the system is too large.
- Reduce the distance.
- Batteries are inserted incorrectly.
- Insert the batteries with their polarities (+/- signs) as indicated.
- Batteries are exhausted.
- Replace the batteries.

**Timer is not working.**

- Clock is not set.
- Set the clock.
- Timer is not switched on.
- Press **TIMER ON/OFF** to switch on the timer.
- Recording is in progress.
- Stop recording.

**Clock setting is erased.**

- There was a power failure.
- Reset the clock.

**System displays features automatically; buttons flash continuously.**

- Demonstration mode is switched on.
- Press and hold **■** (on the system) for 5 seconds to switch off the demonstration.

**There is a howling sound at the external source.**

- You hear feedback when you are listening in AUX mode.
- Press **AUX** to select **CDR/DVD** mode.

**All lighted buttons are not lit.**

- Display is switch on in DIM 3 mode.
- Press **DIM** until **DIM OFF** display mode is shown.