

mini hifi system

FW55C FW45C
FW320C



Toll Free Help Line

Ligne d'assistance en service libre
Linea de ayuda telefónica sin cargo

800-531-0039



Let's make things better.

PHILIPS **MAGNAVOX**

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

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

Warranty Verification

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

Owner Confirmation

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

Model Registration

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

Know these
safety symbols



For Customer Use

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

Model No. _____

Serial No. _____



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



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

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

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

PHILIPS **MAGNAVOX**

***Congratulations on your purchase,
and welcome to the “family!”***

Dear Philips Magnavox product owner:

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

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

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

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

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

Sincerely,



Robert Minkhorst
President and Chief Executive Officer

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



	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		



This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.



This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

WARNING

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION

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

The set complies with the FCC-Rules, Part 15 and with 21 CFR 1040.10.

Canada

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

	AVIS RISQUE DE CHOCS ÉLECTRIQUES NE PAS OUVRIR	
Attention: Afin de prévenir le risque de chocs électriques, ne pas retirer les vis. Toute réparation devrait être confiée à un personnel qualifié.		



Ce symbole indique la présence d'une tension suffisamment élevée pour engendrer un risque de chocs électriques.



Ce symbole indique que le manuel d'installation fourni avec l'appareil contient d'importantes recommandations quant au fonctionnement et à l'entretien de ce dernier.

AVIS

Afin de réduire tout risque d'incendie ou de choc électrique, il ne faut pas exposer cet appareil à la pluie ou à l'humidité.

ATTENTION

L'utilisation des commandes ou réglages ou le non-respect des procédures ci-incluses peuvent se traduire par une exposition dangereuse à l'irradiation.

L'appareil répond aux normes FCC, Part 15 et 21 CFR 1040.10.

Canada

Cet appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Class B prescrites dans le Règlement sur le Brouillage Radioélectrique édicté par le Ministère des Communications du Canada.

	AVISO RIESGO DE CHOQUE ELÉCTRICO NO ABRIR	
Atención: Para reducir el riesgo de choque eléctrico, no quite la tapa (o el panel posterior). En su interior no hay piezas que el usuario pueda reparar. Para servicio dirijase a personal calificado.		



Este símbolo tiene por finalidad advertir al usuario de la presencia de tensión peligrosa no aislada dentro de la caja del aparato, que puede ser lo suficientemente fuerte para constituir un peligro de choque eléctrico.



Este símbolo sirve para advertir al usuario de la presencia de instrucciones de manejo y mantenimiento (servicio) importantes en el manual que acompaña al aparato.

AVISO

Para reducir el riesgo de fuego o choque eléctrico, no exponga el aparato a la lluvia o humedad.

ATENCIÓN

El uso de mando o ajustes o la ejecución de métodos que no sean los aquí descritos puede ocasionar peligro de exposición a radiación.

El aparato cumple las normas FCC, Parte 15 y 21 CFR 1040.10.

FW320C



English 6

Français 28

Español 54

English

Français

Español

FW45C




FW55C



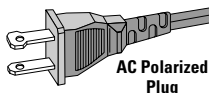
**CLASS 1
LASER PRODUCT**

SAFETY INSTRUCTIONS – Read before operating equipment

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

- 1. Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.
- 2. Retain Instructions** - The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.
- 4. Follow Instructions** - All operating and use instructions should be followed.
- 5. Water and Moisture** - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub or swimming pool, or in a wet basement.
- 6. Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.
- 6A.**  An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- 7. Wall or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation** - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- 9. Heat** - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 10. Power Sources** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- 11. Grounding or Polarization** - Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

CAUTION: To prevent electric shock, match the wide blade of this plug to the wide slot and fully insert. Do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

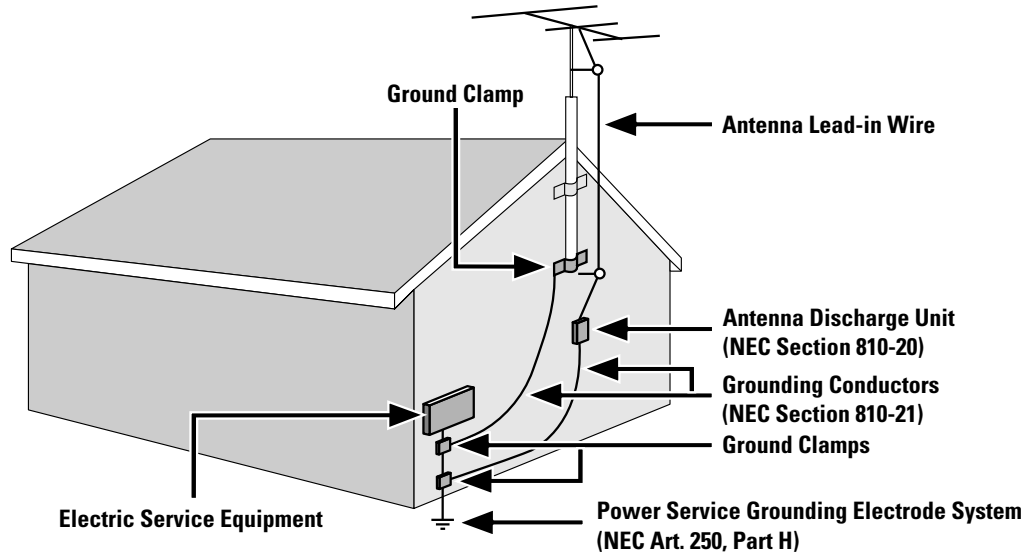


- 12. Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
- 13. Cleaning** - The appliance should be cleaned only as recommended by the manufacturer.
- 14. Power Lines** - An outdoor antenna should be located away from power lines.
- 15. Outdoor Antenna Grounding** - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See figure on page 7.
- 16. Non-use Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 17. Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 18. Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:
 - A.** The power supply cord or the plug has been damaged; or
 - B.** Objects have fallen, or liquid has spilled into the appliance; or
 - C.** The appliance has been exposed to rain; or
 - D.** The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E.** The appliance has been dropped, or the enclosure damaged.
- 19. Servicing** - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Note to the Cable TV system installer

This reminder is provided to call the Cable TV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Example of Antenna Grounding as per NEC - National Electrical Code



LIMITED WARRANTY

AUDIO SYSTEM

One Year Free Labor

One Year Free Service on Parts

This product must be carried in for repair.

WHO IS COVERED?

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

WHAT IS COVERED?

Warranty coverage begins the day you buy your product. For one year thereafter, all parts will be repaired or replaced, and labor is free. After one year from the day of purchase, you pay for the replacement or repair of all parts, and for all labor charges.

All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the product expires, the warranty on all replaced and repaired parts also expires.

WHAT IS EXCLUDED?

Your warranty does not cover:

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

- a product that is used for commercial or institutional purposes.

WHERE IS SERVICE AVAILABLE?

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

MAKE SURE YOU KEEP...

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

BEFORE REQUESTING SERVICE...

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

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

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

TO GET WARRANTY SERVICE IN CANADA...

Please contact Philips at:

1-800-661-6162 (French Speaking)

1-800-363-7278 (English Speaking)

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

REMEMBER...

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

MODEL # _____

SERIAL # _____

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

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

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General Information

- **The typeplate (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 device complies with the Federal Communications Commission (FCC) rules, part 15 and with 21 CFR 1040.10. Operation is subject to the following two conditions:**
 - **This device may not cause harmful interference, and**
 - **This device must accept any interference received, including interference that may cause undesired operation.**

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.

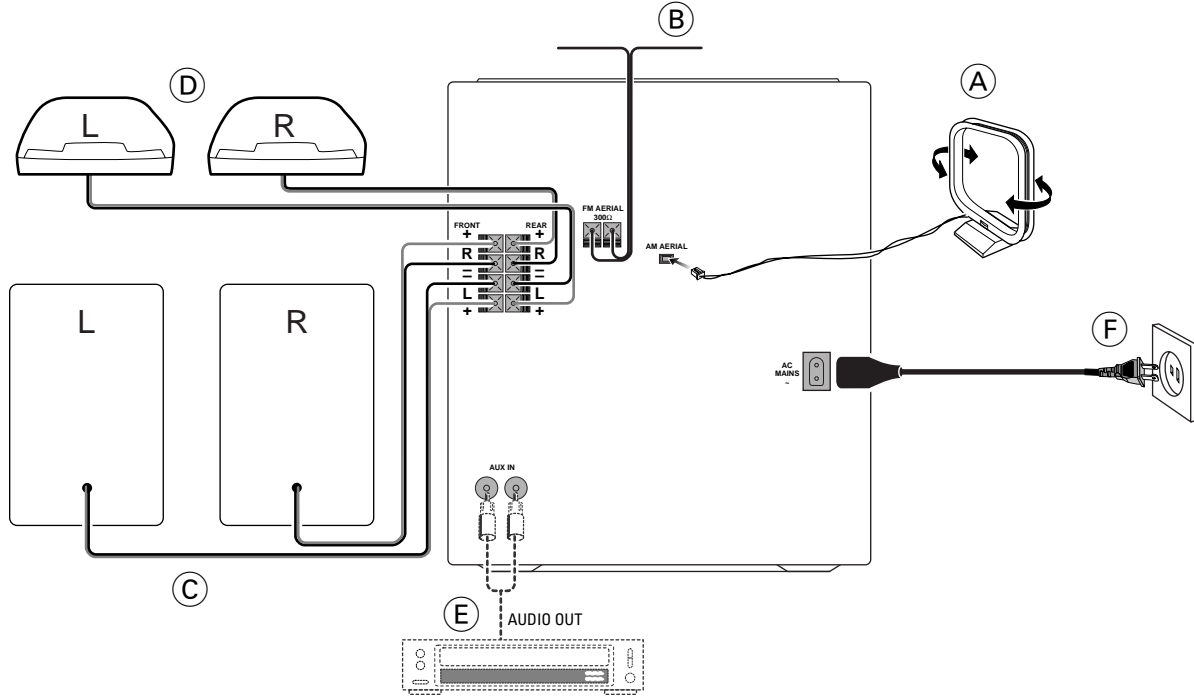
Accessories *(Supplied)*

- Remote control
- Batteries (two x AA size) for remote control
- AM loop antenna
- FM wire antenna
- AC power cord
- One pair of Surround Speakers *(FW55C only)*

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 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.**

Rear Connections



(A) AM Loop Antenna Connection

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

(B) FM Wire Antenna Connection

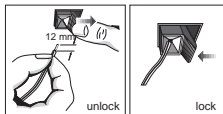
Connect the supplied FM wire antenna to the FM AERIAL 300 Ω terminal. Adjust the position of the FM antenna for the best reception.

Outdoor Antenna

For better FM stereo reception connect an outdoor FM antenna to the FM AERIAL 300 Ω terminal using a 300 Ω dipole wire.

(C) Speaker Connections

- 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.



(D) Surround Speakers Connection

(for FW55C only)

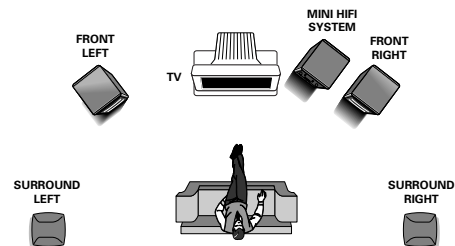
4-Speakers Connection

- **Front speakers** : Connect the black wires to the black FRONT terminals and the red wires to the red FRONT terminals.

- **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.

Positioning the Speakers

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



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. Should the magnetic field from the speakers affect the picture of the television, you should increase the separation distance.

Rear (surround) 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.

(E) Connecting other equipment to your system

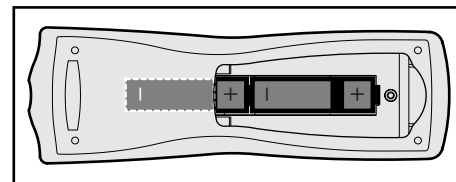
You can connect the audio left and right OUT terminals of a TV, VCR, Laser Disc or DVD player to the AUX IN terminals at the rear of the system.

(F) AC Power Supply

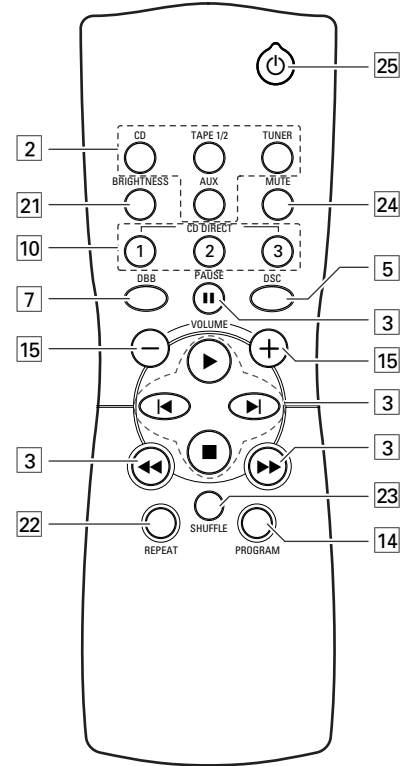
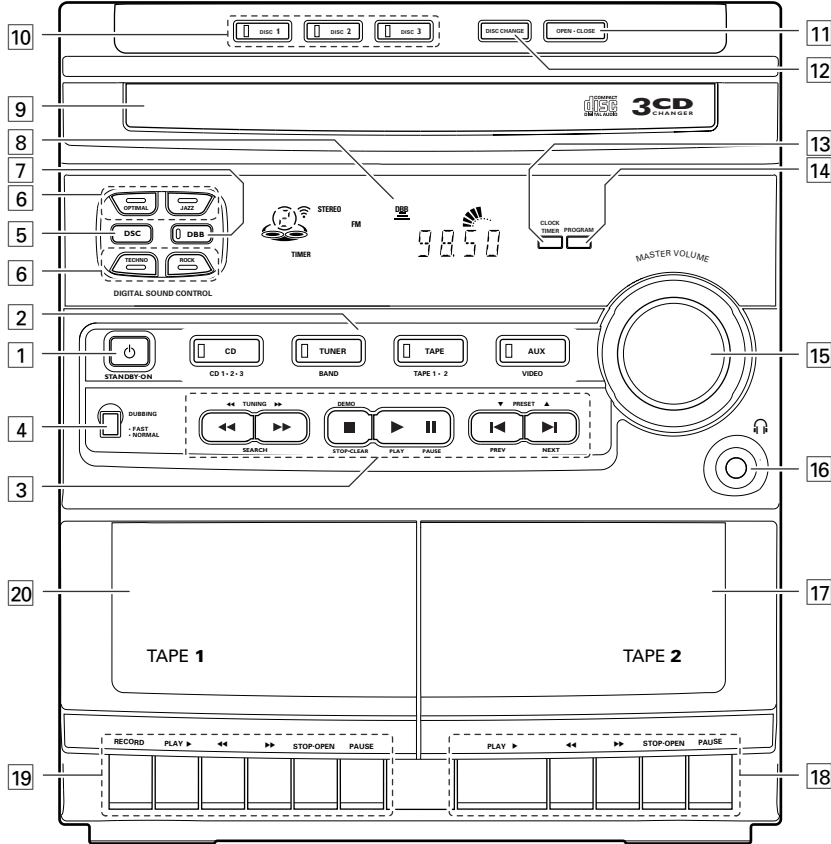
After all other connections have been made, connect the AC power cord to the system and to the wall outlet.

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.



Controls on the system and remote control

1 STANDBY-ON

- to switch the system on or to standby mode.
- to store radio stations automatically by pressing and holding for 5 seconds.

2 SOURCE : to select the following. CD / (CD 1•2•3)

- to select CD mode. When CD in stop mode; to select the disc tray 1, 2 or 3.

TUNER / (BAND)

- to select Tuner mode. When in tuner mode; to select the waveband: FM or AM.

TAPE / (TAPE 1•2)

- to select Tape mode.

AUX / (VIDEO)

- to select sound from an external source (e.g. TV, Laser Disc, DVD or VCR player).

3 MODE SELECTION

SEARCH ◀◀ ▶▶ (TUNING ◀◀ ▶▶)

for CD to search backward/forward.

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

STOP•CLEAR ■ (DEMO)

for CD to stop CD playback or clear a program.

for TUNER to stop programming.

DEMO to stop demonstration.

PLAY ▶ / PAUSE II

for CD to start or interrupt playback.

PREV ◀ / NEXT ▶ (PRESET ▼ ▲)

for CD to skip to the beginning of the current or previous/next track.

for TUNER to select a preset station in memory.

4 DUBBING

- to dub a tape in normal or fast speed.

5 DIGITAL SOUND CONTROL (DSC)

- to select the desired sound effect : OPTIMAL, JAZZ, ROCK or TECHNO.

6 DIGITAL SOUND CONTROL DISPLAY PANEL

- to view the selected DSC display.

7 DYNAMIC BASS BOOST (DBB)

- to switch on bass boost to enhance bass response or to switch off bass boost.

8 DISPLAY

- to view the current setting of the system.

9 CD CAROUSEL TRAY

10 CD DIRECT PLAY (DISC 1 / DISC 2 / DISC 3)

- to select a CD tray for playback.

11 OPEN•CLOSE

- to open or close the CD carousel tray.

12 DISC CHANGE

- to change CD(s).

13 CLOCK•TIMER

- to view clock, set clock or timer.

14 PROGRAM

- to program CD tracks in CD mode or preset radio stations in tuner mode.

15 VOLUME

- to adjust the volume level.

16

- to connect headphones.

17 TAPE DECK 2

18 TAPE DECK 2 OPERATION

PLAY ▶ to start playback.

◀◀ to rewind the tape.

▶▶ to fast forward the tape.

STOP•OPEN to stop playback or to open the tape door.

PAUSE to interrupt playback.

19 TAPE DECK 1 OPERATION

RECORD to start recording.

PLAY ▶ to start playback.

◀◀ to rewind the tape.

▶▶ to fast forward the tape.

STOP•OPEN to stop playback/recording or to open the tape door.

PAUSE to interrupt playback or recording.

20 TAPE DECK 1

21 BRIGHTNESS (available in model FWG20 only)

- to adjust the intensity of the display illumination.

22 REPEAT

- to repeat a CD track.

23 SHUFFLE

- to play all the available discs and their tracks in random order.

24 MUTE

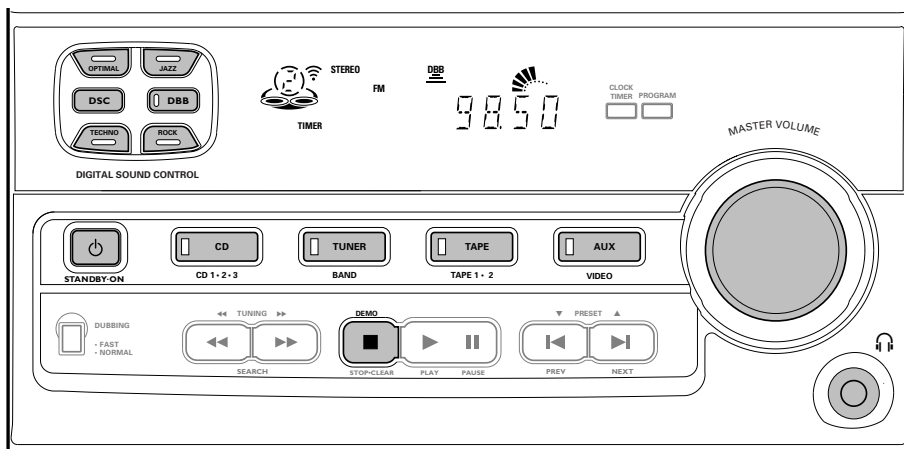
- to switch off the sound temporarily.

25

- 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, TAPE 1/2 or AUX).
- Then select the desired function (PLAY, NEXT, etc.).



Important:

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

Demonstration 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.**

Notes:

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

To cancel demonstration mode

- Press and hold **STOP•CLEAR** ■ (DEMO) (on the system only) for **5 seconds** to stop the demonstration.
 - The demonstration mode will be switched off.
 - The system will switch to standby mode.

Easy Set

EASY SET allows you to store all available radio stations in a particular band (FM or AM) automatically.

- 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".
 - EASY SET will start with the last active band.
 - All available radio stations with sufficient signal strength will be stored or until 40 presets are filled.

Notes :

- When EASY SET is used, all previously stored stations will be erased.
- The last preset station will appear on the display when EASY SET is completed.

Switching the system ON

- Press **STANDBY•ON** (on the system only), **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** again.
 - The system will switch to standby mode.

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 that you have connected the audio left and right **OUT** terminals of the external equipment (TV, VCR, Laser Disc or DVD player) to the **AUX IN** terminals.

Sound Control

Volume Adjustment

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

For Personal Listening

Connect the headphones plug to the  socket at the front of the system. The speakers will be muted.

Digital Sound Control (DSC)

The DSC feature enables you to enjoy special sound effects that have preset equalizer settings, providing the best music reproduction.

- Press **DIGITAL SOUND CONTROL (DSC)** to select **OPTIMAL**, **JAZZ**, **ROCK** or **TECHNO**.
→ The Digital Sound Control display panel will light up respectively.
→ "**OPTIMAL**", **JAZZ**, **ROCK** or **TECHNO**" will be displayed.

Automatic DSC-DBB selection

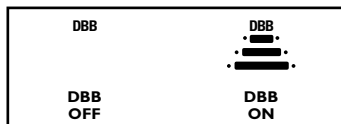
The best setting for the DBB is automatically generated for the respective DSC selection. You can manually select the DBB setting that best suits your listening environment.

DSC Selection	DBB On/Off
Optimal	On
Jazz	Off
Rock	Off
Techno	On

Dynamic Bass Boost (DBB)

The DBB mode enhances the bass response.

- Press **DBB** to switch on bass response.
→ The DBB button lights up.
→ "**DBB ON**" will be displayed.



To switch off DBB

- Press **DBB** again.
→ The DBB button light is switched off.
→ "**DBB OFF**" will be displayed.

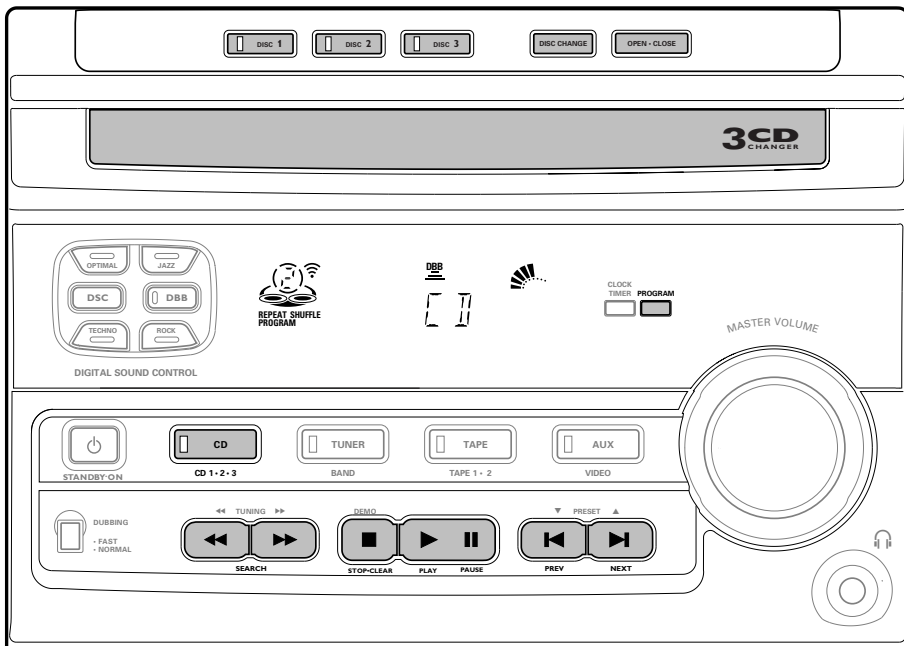
Note:

- Some CDs or tapes might be recorded in high modulation. It may cause a distortion at high volume. If this occurs, switch off DBB or reduce the volume.

Mute (only on remote control)

This feature allows you to temporarily switch off the sound of the system without switching off the system when you require a moment of silence.

- Press **MUTE** on the remote control to switch off the sound.
→ "**MUTE**" will be displayed.
- Press **MUTE** again on the remote control or increase the **VOLUME** level to switch on the sound.



Warning!

- 1) This system 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 system. This may jam the changer.

You can load up to three discs in the CD changer for continuous playback without interruption.

Loading the CD Changer

- 1 Press **CD** 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 **DISC CHANGE** button.
→ 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 disc in 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.

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.

- When the button is lighted, it indicates that there is a disc loaded in the disc tray.

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 II**.
→ The playing time flashes.
 - To resume playback, press **PLAY ►** again.
- 2 To stop playback, press **STOP•CLEAR ■**.

Note:

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

Disc Change

You can change the outer 2 discs while the third inner disc is at the stop or playing mode.

- 1 Press **DISC CHANGE**.
 - The CD compartment slides out.
- 2 Replaced the discs in the left and right disc trays.
 - If you press **DISC CHANGE** again during playback, the CD will stop playing.
 - The CD carousel tray will rotate until the inner tray is at the right hand side and is ready for changing.
- 3 Press **OPEN•CLOSE** to close the CD compartment.

Selecting a desired track

Selecting a desired track at the stop mode

- 1 Press **PREV** ◀ or **NEXT** ▶ 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

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

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 in the stop mode. 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 starts flashing.
- 3 Press the **CD** (CD 1•2•3) button to select the disc.
- 4 Press **PREV** ◀ or **NEXT** ▶ 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 **STOP•CLEAR** ■ once to end programming mode.
 - 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 in the display instead of the total playing time.
- During programming, if no button is pressed within 20 seconds, the system will exit program mode automatically.

Playing the program

- 1 Press **PLAY** ▶ to start program playback.
 - "PLAY PROGRAM" appears on the display.
 - 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 will be played repeatedly.
 - The REPEAT and PROGRAM flags will be displayed.
- 2 Press **STOP•CLEAR** ■ to stop program playback.

Note:

- 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 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 **PREV** ◀ or **NEXT** ▶ repeatedly to review the programmed tracks.
- Press **STOP•CLEAR** ■ to exit review mode.

Erasing the program (in the stop mode)

- Press **STOP•CLEAR** ■ on the system.
 - "PROGRAM CLEAR" will be displayed.

Note:

- The program will be erased when the system is disconnected from the power supply. If the CD carousel is opened, the tracks belonging to the outer two trays will be erased and the display will show "CLEAR".

Shuffle *(only on remote control)*

It will play all the available discs and their tracks in random order. Shuffle may also be used when tracks are programmed.

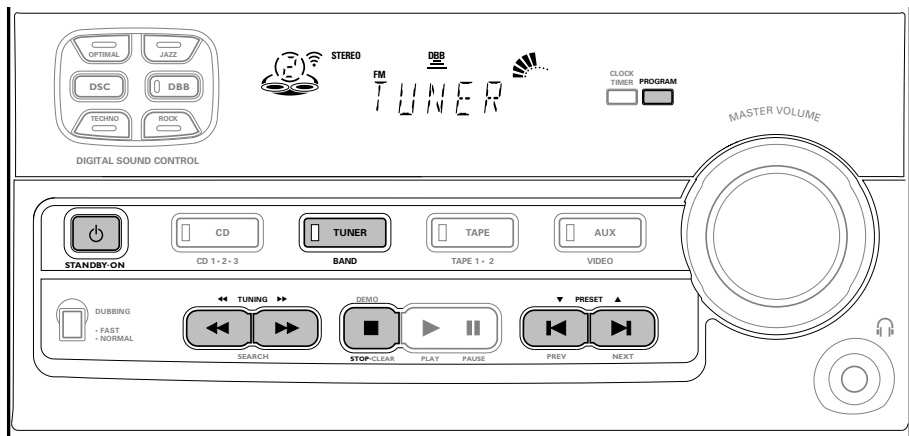
To shuffle all the discs and tracks

- 1 Press **SHUFFLE**.
 - "SHUFFLE" will be displayed.
 - 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 **STOP•CLEAR** ■.
- If you press **REPEAT** during shuffling, the current track will be played repeatedly.
 - The REPEAT and SHUFFLE flags will be displayed.
- 2 Press **SHUFFLE** again to resume normal playback.
 - The SHUFFLE flag disappears from the display.

Repeat *(only on remote control)*

It will play the current track repeatedly.

- 1 Press **REPEAT** during CD playback.
 - "REPEAT TRACK" will be displayed.
 - The REPEAT flag appears on the display.
- The track will now be played repeatedly until you press **STOP•CLEAR** ■.
- 2 Press **REPEAT** again to resume normal playback.
 - The REPEAT flag disappears from the display.

**Easy Set**

EASY SET allows you to store all available radio stations in a particular band (FM or AM) automatically.

- 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".
 - EASY SET will start with the last active band.
 - All available radio stations with sufficient signal strength will be stored or until 40 presets are filled.

Notes:

- When EASY SET is used, all previously stored radio stations will be erased.
- The last preset radio station will appear on the display when EASY SET is completed.

Tuning to radio stations

- 1 Press **TUNER** to select TUNER mode.
→ "TUNER" will be displayed.
A few seconds later, the current frequency is displayed.
 - 2 Press **TUNER** (BAND) again to select the desired waveband : FM or AM.
 - 3 Press **TUNING** ◀◀ 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 **TUNING** ◀◀ or ▶▶ 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

- 1 Press **TUNER**.
- 2 Press **TUNER** (BAND) again to select the desired waveband : FM or AM.
- 3 Press **PROGRAM** for more than one second.
→ PROGRAM flag starts flashing and 'AUTO' will be displayed.
→ Every available station for the selected waveband 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.

- Repeat the above procedure to store other preset radio stations for the other waveband. Remember to select the next available preset number before proceeding. If not, some of the preset radio stations may be erased.

Notes:

- You can cancel the automatic programming by pressing **PROGRAM** or **STOP•CLEAR** ■ 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: now only the preset numbers 10 to 40 will be programmed.

Manual programming

- 1 Press **TUNER**.
- 2 Press **TUNER** (BAND) to select the desired waveband : FM or AM.
- 3 Press **PROGRAM** for less than one second.
→ PROGRAM flag, the frequency and preset number start flashing.
→ The next available preset number will be displayed for selection.
- 4 Press **TUNING** ◀◀ or ▶▶ to tune to the desired frequency.
• If you wish to store the radio station to another preset number, press **PRESET** ▼ or ▲ to select the desired preset number.
- 5 Press **PROGRAM** again.
→ PROGRAM flag will stop flashing, and the radio station will be stored.

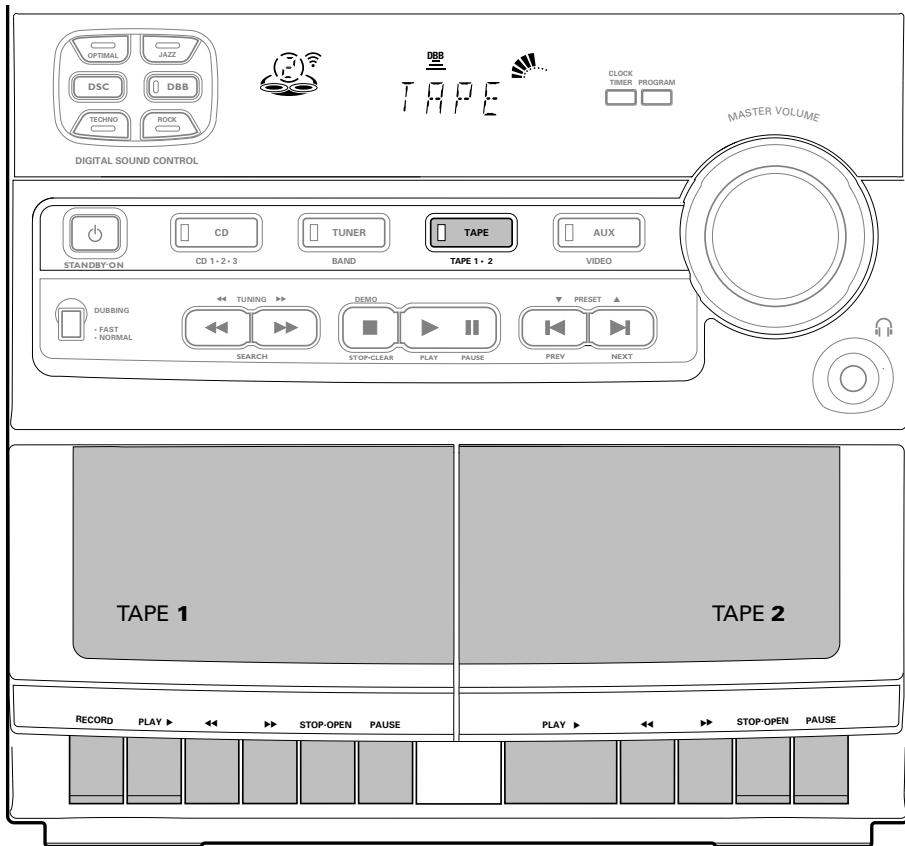
- Repeat the above procedure to store other preset radio stations.

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 4 and 5.
- You can cancel manual programming by pressing **STOP•CLEAR** ■ on the system only.
- During programming, if no button is pressed within 20 seconds, the system will exit program mode automatically.

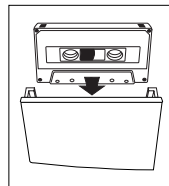
Tuning to Preset Radio Stations

- Press **PRESET** ▼ or ▲ to select the desired preset number.
→ The preset number, frequency and waveband appear on the display



Loading a tape

- Press **STOP•OPEN**.
- The tape deck door opens.
- Load the tape with the open side downward and the full spool to the left.
- Close the tape deck door.



Tape Playback

- 1 Press **TAPE** to select TAPE mode.
→ "TAPE" will be displayed.
- 2 Load the tape into the selected tape deck.
- 3 Press **PLAY ▶** to start playback.
 - To interrupt playback, press **PAUSE**.
 - To resume playback, press **PAUSE** again.
- 4 Press **STOP•OPEN** to end playback.

Rewind/Fast Forward

At the stop mode

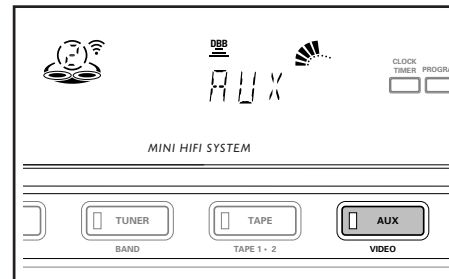
- 1 You can rewind or fast forward a tape by pressing **◀◀** or **▶▶** respectively.
→ The tape will stop automatically at the end of rewinding or fast forwarding.
- 2 Press **STOP•OPEN** to stop rewinding or fast forwarding.

Continuous Playback From Tape Deck 2 to Tape Deck 1

- 1 Press **TAPE** to select TAPE mode.
- 2 Load the tapes in **tape deck 1** and **2**.
- 3 Press **PLAY ►** on **tape deck 2**.
- 4 Press **PAUSE** on **tape deck 1**.
- 5 Press **PLAY ►** on **tape deck 1**.
→ Playback will begin with tape deck 2 and will continue with tape deck 1 when playback on tape deck 2 ends.
- 6 Press **STOP•OPEN** if you want to stop playback before the end of the tape in **tape deck 1** or **tape deck 2**.

Notes:

- During rewinding or fast forwarding of a tape, it is also possible to select another source mode (e.g. CD, TUNER or AUX mode).
- Check and tighten slack tape before use 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 loudspeaker boxes).



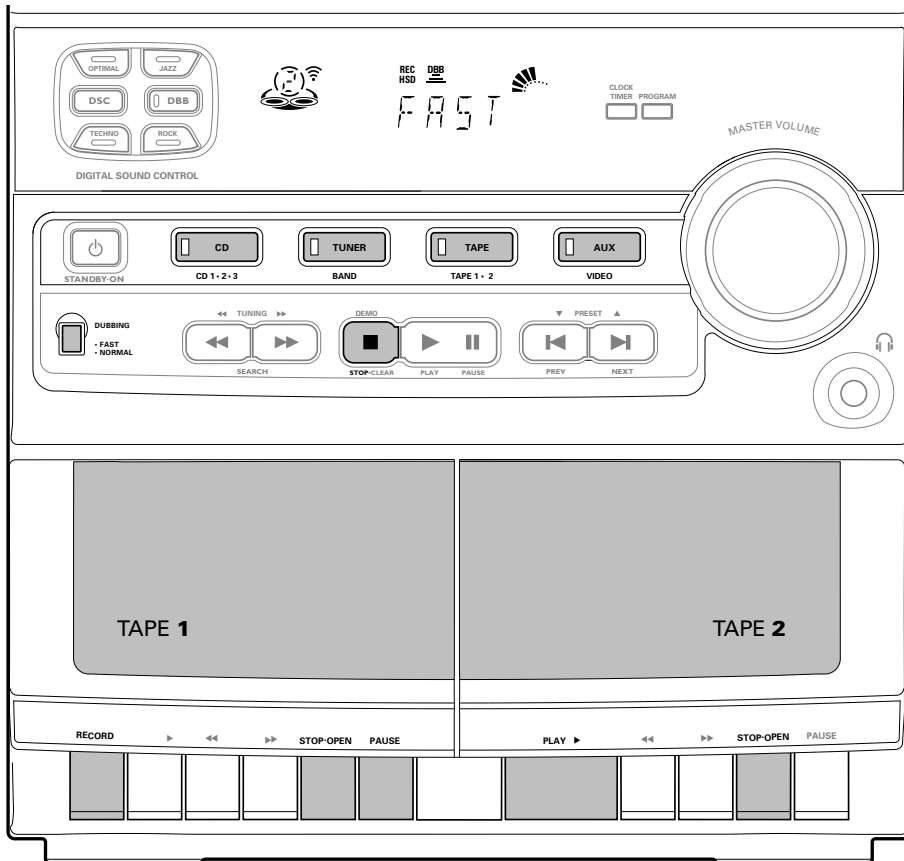
Selecting External Equipment

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

- Press **AUX** to select the external mode.
→ "AUX" will be displayed.

Note:

- All the sound control features (e.g. DSC, DBB, etc.) are available for selection.



Notes:

- For recording, use only tape of IEC type I (normal tape).
- 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 or DBB.
- To prevent accidental recording, break out the tab on the left shoulder of the tape side you want to protect.

One Touch Recording

- For One Touch Recording, as soon as you press RECORD, the current source will be recorded on tape deck 1.

- 1 Load a blank tape in tape deck 1.
- 2 Press **RECORD** on tape deck 1 to start recording.
→ The REC flag starts flashing.
- 3 Press **PAUSE** to interrupt recording.
- 4 Press **STOP•OPEN** on tape deck 1 to stop recording.

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

- 1 Load the prerecorded tape into tape deck 2 and a blank tape into tape deck 1.
→ Make sure that both tapes have their full spool to the left.
- 2 Press **DUBBING** to switch between normal and high speed dubbing.
→ "NORMAL" (normal speed) or "FAST" (high speed) will be displayed.
→ HSD flag appears on the display for high speed dubbing.
- 3 Press **PAUSE** on tape deck 1.
- 4 Press **RECORD** on tape deck 1.
- 5 Press **PLAY** on tape deck 2.
→ Recording will start automatically.
→ The REC flag starts flashing.
- 6 Press **STOP•OPEN** on tape deck 1 and tape deck 2 to stop dubbing.

Notes:

- 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 2 to tape deck 1.
- 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.

CD Synchro Start Recording

During CD synchro start recording,

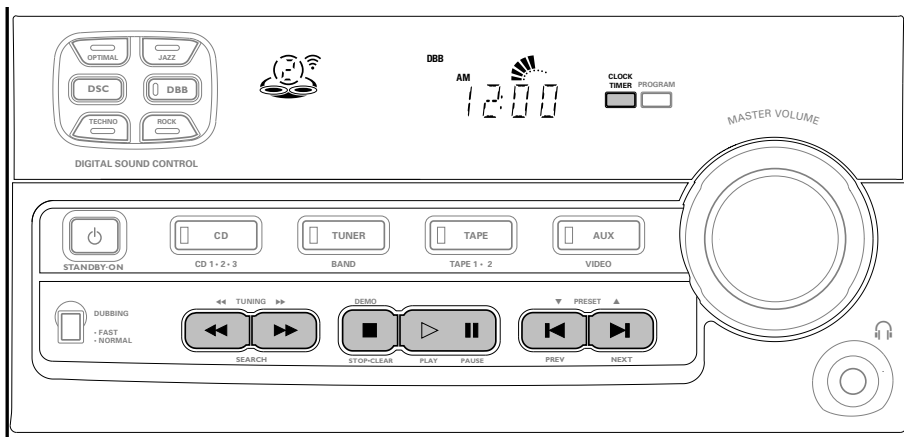
- It is not advisable to fast forward/rewind your tape in tape deck 2.
 - It is not possible to listen to another source.
- 1 Load a blank tape into tape deck 1 and a disc into the disc tray.
 - 2 Press **CD**.
• You can program the tracks in the order you want them to be recorded (see Programming Tracks). If not, the tracks are recorded according to the selected disc.
 - 3 Press **RECORD** on tape deck 1 to start recording.
 - 4 Press **STOP•OPEN** on tape deck 1 to stop recording and **STOP•CLEAR** ■ to stop CD playback.

Recording from other sources *(only on tape deck 1)*

- 1 Load a blank tape into tape deck 1.
- 2 Press **CD, TUNER, TAPE** or **AUX**.
• Start playback of the selected source.
- 3 Press **RECORD** on tape deck 1 to start recording.
→ The REC flag is flashing.
- 4 Press **PAUSE** to interrupt recording.
- 5 Press **STOP•OPEN** on tape deck 1 to stop recording.

Note:

- During recording, it is not possible to listen to another sound source.



View Clock

You can view the clock (if it is set) at standby or any source mode. It will be displayed for about 7 seconds.

- Press **CLOCK•TIMER** briefly.
 - "10:25 PM" (the current time) will be displayed.
 - "- : - : -" will be displayed if the clock is not set.

Clock Setting

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

- 1 Press **CLOCK•TIMER** to select clock mode.
 - "12:00 AM" or the current time starts flashing.
- 2 Set the hour with **◀◀** or **▶▶**.
- 3 Set the minute with **◀** or **▶**.
- 4 Press **CLOCK•TIMER** again to store the setting.
 - The clock starts running.
 - To exit without storing the setting, press **■**.

Notes:

- During clock setting, if no button is pressed within 90 seconds, the system will exit clock setting mode automatically.
- When a power interruption occurs, the clock setting is erased.

Timer Setting

- The system can switch on to CD or TUNER 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 has to be reset or start again for each subsequent preset time.
- **The volume of the timer will be at the last setting before the set is switched to standby mode.**

- 1 Press and hold **CLOCK•TIMER** for more than 2 seconds to select timer mode.
 - "ON 12:00 AM" or the last set timer starts flashing. The TIMER flag flashes.
 - The last selected source is lighted while other available sources are flashing.
- 2 Press **CD** or **TUNER** to select the desired source.
- 3 Press **◀◀** or **▶▶** to set the hour for the timer to start.
- 4 Press **◀** or **▶** to set the minute for the timer to start.
- 5 Press **CLOCK•TIMER** to store the start time.
 - The TIMER is now set.
 - The TIMER flag remains on the display.
 - To exit without storing the setting, press **■**.

- At the preset time, the TIMER will be activated.
 - The selected source will be played.
 - The TIMER flag disappears from the display.

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 last selected disc. If the CD trays are empty, the TUNER will be selected instead.*

To cancel the TIMER

- 1** Press **CLOCK•TIMER** for more than 2 seconds.
- 2** Press **II** to cancel the timer.
 - "CANCEL" will be displayed.
 - The TIMER flag disappears from the display.

To start the TIMER again (for the same time)

- 1** Press **CLOCK•TIMER** for more than 2 seconds.
- 2** Press **CLOCK•TIMER** again to store the start time and the selected source.

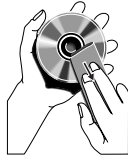
Maintenance

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



Cleaning the CD lens

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

Demagnetizing the heads

- Use a demagnetizing tape available at your dealer.

Specifications

AMPLIFIER

Output power	
FW45C/FW320C (3 Ω, 1 kHz, 10% THD) . . .	2 x 5 W RMS ⁽¹⁾
FW55C (6 Ω, 1 kHz, 10% THD)	2 x 10, 2 x 2 W RMS ⁽¹⁾
Signal-to-noise ratio	≥ 67 dBA (IEC)
Frequency response	50 – 15,000 Hz
Input sensitivity	
Aux In	700 mV
Output	
Speakers (for FW45C/FW320C only)	≥ 3 Ω
Speakers (for FW55C only)	≥ 6 Ω
Surround Speakers (for FW55C only)	≥ 6 Ω
Headphones	32 Ω – 1000 Ω

CD PLAYER

Number of programmable tracks	40
Frequency range	20 – 20,000 Hz
Signal-to-noise ratio	≥ 80 dBA
Channel separation	≥ 60 dB (1 kHz)
Total harmonic distortion	< 0.003%

TUNER

FM wave range	87.5 – 108 MHz
AM wave range	530 – 1700 kHz
Number of presets	40
Antenna	
FM	300 Ω dipole wire
AM	Loop antenna

TAPE DECK

Frequency response	
Normal tape (type I)	80 – 12,500 Hz (8 dB)
Signal-to-noise ratio	
Normal tape (type I)	≥ 48 dBA
Wow and flutter	≤ 0.4% JIS

SPEAKERS (for FW45C/FW320C only)

System	double port bass reflex
Impedance	3 Ω
Woofer	1 x 4" full range
Dimensions (w x h x d)	210 x 310 x 188 (mm)
Weight	2.3 kg each

SPEAKERS (for FW55C only)

System	double port bass reflex
Impedance	6 Ω
Woofer	1 x 4" full range
Dimensions (w x h x d)	210 x 310 x 233 (mm)
Weight	2.3 kg each

SURROUND SPEAKERS (for FW55C only)

System	closed satellite
Impedance	6 Ω
Surround Speaker Driver	1 x 3" full range
Dimensions (w x h x d)	178 x 90 x 178 (mm)
Weight	0.85 kg each

GENERAL INFORMATION

Material/finish	Polystyrene
AC Power	120 V / 60 Hz
Power Consumption	
Active	
FW45C/FW320C	18 W
FW55C	35 W
Standby	
FW45C/FW320C	≤ 11 W
FW55C	≤ 15 W
Dimensions (w x h x d)	265 x 310 x 330 (mm)
Weight (without speakers)	5.2 kg

Subject to modification

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

- 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.*

Radio Reception

Poor radio reception

- 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.*

Tape Deck Operation

"RECORDING ACTIVE" is displayed.

- A recording is in progress.
→ *Stop the recording or wait until it is finished.*

"TAPE DUBBING ONLY" is displayed.

- Tape dubbing is only possible in tape mode.
→ *Switch source to tape mode.*

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.*
- Magnetic build-up in the record/playback head.
→ *Use demagnetizing tape.*

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 and switch on the system again.*

No or poor sound.

- Volume is not turned up.
→ *Adjust VOLUME.*
- The system is muted.
→ *Press MUTE to switch on the sound.*
- 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 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.*

Remote control has no effect on the system.

- 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.*
- Wrong source is selected.
→ *Select the source (CD, TUNER, etc.) before pressing the function button, (PLAY, PREV/NEXT, etc.).*

Timer not working.

- Timer is not switched on.
→ *Press CLOCK • TIMER to switch on the timer.*
- Dubbing/recording is in progress.
→ *Stop dubbing/recording.*

System displays features automatically; buttons flash continuously.

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

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