

This appliance may be fitted with a non-rewireable plug. If it is necessary to change the fuse in a non-rewireable plug the fuse cover must be refitted. If the fuse cover is lost or damaged, the plug must not be used until a replacement available from the appliance manufacturer is obtained. It is important that the colour of the replacement fuse cover corresponds with the colour marking on the base of the plug.

If the plug has to be changed because it is not suitable for your socket, or becomes damaged, it should be cut off and an appropriate plug fitted following the wiring instructions below. The plug removed must be disposed of safely as insertion into a 13A socket is likely to cause an electrical hazard.

For your own safety read the following instructions carefully before attempting to connect this unit to the mains.

MAINS (AC) OPERATION

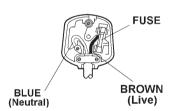
This unit is designed to operate on 230 V, 50 Hz current only. Connecting it to other power sources may damage the unit

The wires in this mains lead are coloured in accordance with the following code :

BLUE=NEUTRAL BROWN=LIVE

IMPORTANT

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:-



The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

No connection is to be made to the earth terminal of the plug.

If a 13 Amp (BS 1363) Plug is used, a 3 Amp Fuse must Plug is used a 3 Amp Fuse must be fitted, either in the

be fitted, or if any other type of Plug, or on the Distribution Board.

CAUTION

To prevent electric shock disconnect from the mains before removing cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

SAFETY PRECAUTION

Do not allow this unit to be exposed to rain or moisture.

Mains Supply: 230 Volts 50 Hz - AC only.



This symbol means that this unit is double insulated. An earth connection is not required.

CAUTION

CLASS 1 LASER PRODUCT

Use of Controls or adjustments or performance of procedures other than those specified herein may result hazerdous radiation expisure.

LASERSAFETY



This unit employs a laser, only quality service personnel should attempt repair.

DANGER: INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK FAILED OR DEFEATED AVDIO DIRECT EXPOSURE TO BEAM. CAUTION: HAZARDOUS LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED.

CAUTION

CLEANING: Always disconnect unit from mains supply before attempting to clean it. Use soft cloth moistened with soapy water, wipe gently. Do not use solvents or abrasive materials.

\mathbf{M} AINTENANCE AND \mathbf{C} ARE

Electronic products of this kind should never be subjected to extreme temperatures or high humidity. For instance, this set should not be placed in bathing areas or around stoves and radiators.

If necessary, clean the unit with a piece of cloth dampened with water only (Be sure the AC Power Cord is disconnected from the Mains). Never use a polish or a strong detergent as this will damage the finish of the cabinet.

This equipment has been designed and manufactured to meet the highest international standards, but, like any electrical apparatus which is operated at mains voltage, care must be taken if you are to obtain the best results and safety is to be assured. This is particularly important with audio equipment.

- **DO...** Read the operating instructions before you attempt to use the equipment.
- **DO...** Ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Check that the mains fuse rating is correct.
- **DO...** Always consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment. He is the best person to advise you.
- **DON'T...** Obstruct the necessary all-round ventilation especially DON'T stand the set close to curtains or on soft furnishing such as carpets. Overheating can cause unnecessary damage and shorten the life of the set.

Remember that to obtain the best performance and lasting satisfaction from your equipment, have it regularly maintained by a reliable service organization. Ensure that it is correctly used by all the family.

ABOVE ALL. . .

Never let children push anything into holes or slots in the case - this could result in an electric shock;

Never guess or take chances with electrical equipment of any kind - it is better to be safe than sorry!

IMPORTANT NOTES

Hearing is very important to you and to us so please take care when operating this equipment. It is strongly recommended that you follow the listed guidelines in order to prevent possible damage or loss of hearing.

ESTABLISH A SAFE SOUND LEVEL

Over time your hearing will adapt to continous loud sounds and will give the impression that the volume has in fact been reduced. What seems normal to you may in fact be harmful. To guard against this **BEFORE YOUR HEARING ADAPTS** set the volume at a low level.

Slowly increase the level until you can hear comfortably and clearly and without distortion. Damage to your hearing is accumulative and is irreversible.

Any ringing or discomfort in the ears indicates that the volume is too loud.

Remember listening for prolonged period of time at high volume levels will harm your hearing.

Once you have established a comfortable listening level, DO NOT INCREASE THE SOUNDLEVELFURTHER.

The following list of typical sound levels may assist you in recognising just how loud you have set the volume level.

DECIBEL

Level (dB)	Example
30dB	Quiet library, soft whisper.
40	Living room, fridge, freezer, bedroom away from traffic.
50	Normal conversation, quiet office, light traffic.
60	Electric sewing machine.
70	Vacuum cleaner, hair dryer, noisy restaurant.

THE FOLLOWING NOISE CAN BE HARMFUL UNDER CONSTANT EXPOSURE

80dB	Average city traffic, alarm clock buzzer at 2 feet, food mixer.
90dB	Motorcycle, heavy goods vehicle, petrol lawn mower.
100	Pneumatic drill, chain saw, garbage truck, discotheque / night-club.
120	Rock band concert, thunderclap, fast train passing by.

PERMANENT LOSS OF HEARING

140	THRESHOLD OF PAIN	Gunshot 2 feet away,	jet plane taking off.
180	Rocket Launching pad.		

TABLE OF CONTENTS

This instruction manual is important to you. Please read it carefully. This manual tells exactly how to connect, operate and adjust this unit for best performance.

It shows simple things to do and check before you call for help and saves the cost of unnecessary service and call out charges.

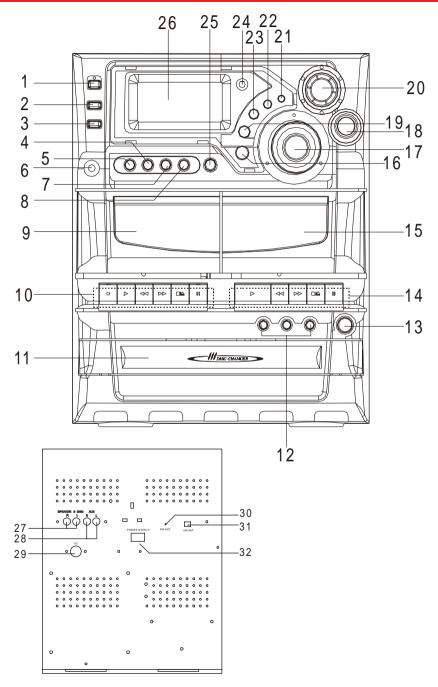
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Pack contents:

- 1 x main unit
- 1 x remote control
- 1 x MW Loop antenna
- 2 x speakers
- 1 x instruction manual

Please retain all packing material for future transportation of the unit or the unlikely event that the unit needs to be returned for service.

LOCATION OF CONTROLS



LOCATION OF CONTROLS

- 1. STANDBY/ON Button
- 2. MUTE Button
- 3. PRESET EQUALIZER
- 4. TUNER/BAND Button
- 5. AUX Button
- 6. HEADPHONES Socket
- 7. CD/DISC SKIP Button
- 8. TAPE Button
- 9. CASSETTE COMPARTMENT A
- 10. Cassette Keys on Deck A:
 - (from left to right)
 - **RECORD** Key
 - PLAY Key
 - **REWIND Key**
 - FAST FORWARD Key
 - STOP/EJECT Key
 - PAUSE Key
- 11. CD Tray
- 12. CD DIRECT Access 1, 2, 3
- 13. CD OPEN / CLOSE Button
- 14. Cassette Keys on Deck B:
 - (from left to right)
 - PLAY Key
 - **REWIND Key**
 - FAST FORWARD Key
 - STOP/EJECT Key
 - PAUSE Key
- 15. CASSETTE COMPARTMENT B

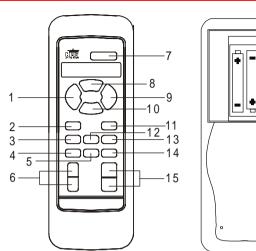
- 16. CDPLAY/PAUSEButton
- 17. VOLUMEControl
- 18. BALANCE Control
- 19. CDSTOP/MEMORYDOWN Button
- 20. TUNING UP/DOWN Control and CDSKIPFORWARD/BACKWARD Control
- 21. RANDOM Button
- 22. CD REPEAT / MEMORY UP Button
- 23. MEMORY Button
- 24. REMOTE Sensor
- 25. HIGHSPEED DUBBING/ FM STEREO Selector
- 26. Display

Rear of Unit

- 27. Speaker Sockets
- 28. AUX Sockets
- 29. AC Mains Cable
- 30. MW Aerial
- 31. FM Aerial
- 32. Power Switch

REMOTE CONTROL

- 1. Tape Button
- 2. Memory / Program Button
- 3. Repeat / Memory Up Button
- 4. Intro Button
- 5. P.EQ Button
- 6. Skip Up / Down Buttons
- 7. Standby/On Button
- 8. CD / Disc Skip Button
- 9. Tuner Button / Band Selector
- 10. AUX Button
- 11. Random Button
- 12. Stop / Memory Down Button
- 13. Play / Pause Button
- 14. Mute Button
- 15. Volume Up + Down Buttons



BATTERY INSTALLATION

Insert 2 AAA size batteries into the battery compartment of the remote controller and replace the cover observing polarity markings.

BATTERYREPLACEMENT

When the batteries become exhausted, the operating distance of the remote controller is greatly reduced and you will need to replace the batteries.

Notes: To maintain the accuracy and long life of the transmitter, do not press two or more Buttons simultaneously.

If the remote control is not to be used for a long time, remove the batteries to prevent possible damage through leaking batteries.

Do not mix different types of batteries, or old batteries with new ones.

USING THE REMOTE CONTROLLER CORRECTLY

Point the remote controller at the Remote Sensor.

The functions of the Buttons on the remote control are the same as the corresponding controls on the main unit.

When there is a strong ambient light source, the performance of the infrared Remote Sensor may be degraded, causing unreliable operation.

The maximum effective distance for remote control operation is about 5 metres (16.5 feet).

Remove the stereo carefully from the box, retaining the packaging for future use. Read these instructions carefully before use.

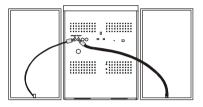
CONNECTIONS

Before switching on your stereo system, ensure that it is connected as follows:

SPEAKERS

Connect the speakers to the speaker sockets on the back of the music system.

• Connect the left speaker to the left speaker socket and the right speaker to the right speaker socket.



LISTENING TO THE RADIO

OPERATION

- Press the STANDBY/ON Button to turn the unit on.
- Press the TUNER/BAND Button.
- Select the required band (FM or MW) by pressing TUNER/BAND Button again.
- Adjust the VOLUME to the desired level using the VOLUME Control Buttons.
- O To turn off the radio, press the STANDBY/ON Button.

MANUAL TUNING

Repeatedly twist the TUNE UP/DOWN Control briefly until the desired station is found.

AUTOMATIC TUNING

Rotate and hold the TUNE UP/DOWN Control for approximatly half a second and the unit will find the next/previous receivable station automatically.

STORING PRESET STATIONS

Tune to the station to be stored using one of the methods above.

Press the MEMORY button once, "MEMORY" will flash on the display.

Press the MEMORY Up button or MEMORY Down button to select the desired preset.

Press the MEMORY Button to store the station in the seleted preset.

Upto 20 FM stations and 20 MW Stations can be stored.

TUNING TO A PRESET STATION

Select the desired preset station by pressing the M-Up or M-Down buttons.

HANDLING COMPACT DISCS

To remove a disc from its storage case, press down on the centre of the case and lift th disc out, holding it carefully by the edges.



Fingerprints and dust should be carefully wiped off the disc's recorded surface with a soft cloth. Unlike conventional records, compact discs have no grooves to collect dust and microscopic debris so gently wiping with a soft cloth should remove most particles. Wipe in a straight line from the inside to the outside of the disc. Small dust particles and light stains are likely to have no effect on reproduction quality.

Never use chemicals such as record sprays, antistatic sprays, benzine, or thinners to clean compact discs. These chemicals can irreparably damage the disc's surface.

Discs should be returned to their cases after use. This avoids serious scratches that could cause the Laser pickup to skip.

Do not expose discs to direct sunlight, high humidity, or high temperatures for extended periods. Long exposure to high temperatures can warp the disc.

LOADING DISCS

LOADING AND UNLOADING COMPACT DISCS

- Press the CD/DISC SKIP button.
- Press the CD OPEN/CLOSE button to open the disc tray.
- Once the CD tray has opened, remove a disc from its case and place it carefully in one of the indentations in the compartment with the label side facing up. Smaller, 3" (8 cm) discs, may also be used with this CD player.
- To load additional CD's press the CD/Disc Skip button to rotate the CD tray, upto 3 discs can be placed in the tray at any one time.
- To close the disc compartment press the CD Open/Close Button or Play/Pause button.

CAUTION

- Do not put anything except a compact disc into the compartment. Foreign objects can damage the mechanism.
- O Do not force the compartment by hand during the opening and closing operations.
- Keep the disc compartment closed when not in use to prevent dirt and dust from entering the mechanism.

- Press the CD/SKIP Button or CD direct access buttons to select the CD of your choice.
- O Press the Play/Pause Button, disc play will begin from the start of the first track. A particular track can be selected by turning the CD SKIP Control. If this is done before pressing the Play/Pause Button, disc play will start with the selected track when the Play/Pause Button is pressed.
- At the end of the disc, playback will stop.

Notes: If the disc is deeply scratched, or too dirty, disc play may not start. If an improperly centred disc is played, noise may be heard in the mechanism. The use of such discs should be avoided.

IMPORTANT INFORMATION

This compact disc player has built-in error compensation circuits to correct for minor defects in a disc. There are limits, however, to the amount of correction available.

In some cases, the CD player may skip some tracks on a disc during disc play. This problem may be caused by defects (such as scratches) in the disc being played, which are too large for the error compensation circuits to handle. If you encounter this problem,

play a new disc. If the CD player operates normally, the skipping problem is probably due to a defective disc.

TO STOP A CD PART WAY THROUGH

- Press the Stop Button. Disc playback will stop, the Play indicator will turn off, and the display will show the total number of tracks and the total playing time of the CD.
- To pause playback, press the Play/Pause Button. Disc play will pause at the current play position and the display will flash.
- To resume playback, press the Play/Pause Button again. The Play indicator will be displayed.

TRACK SKIP

TO SKIP TO THE NEXT TRACK ON A DISC

- O For example, to skip ahead to the beginning of track 5 while track 4 is playing.
- Twist the CD SKIP Control clockwise once. Disc playback will resume at the beginning of track 5.

The CD player will skip ahead to the next track each time the CD SKIP Control knob is twisted clockwise. Repeatedly twisting the CD SKIP Control makes the CD player skip ahead through the disc track by track. Once the beginning of the last track is reached the CD player will not advance any further.

TO SKIP BACK TO THE PREVIOUS TRACK ON A DISC

- O For example to skip back to the beginning of track 3 while track 4 is playing.
- Twist the CD SKIP Control twice anticlockwise. Disc play will resume at the beginning of track 3.

The CD player will skip back one track each time the CD SKIP is twisted. If this control is twisted anticlockwise once in the middle of a track, the CD player will skip back to the beginning of that track. To skip back to the previous track twist the control anticlockwise again.

Repeatedly twisting the control anticlockwise will skip back through the disc track by track. Once the beginning of the first track is reached, the CD player will not go back any further.

DISC SKIP

O To skip to the next disc simply press the CD/DISC Skip Button, the unit will cycle through position 1 - 2 - 3 - 1 - 2 etc

RANDOM PLAY

• To play all tracks on all discs in a random order, press the RANDOM button followed by PLAY/PAUSE button.

REPEAT DISC PLAY

If the REPEAT Button is pressed during normal or programmed disc play the following repeat functions are displayed in sequence in the CD Display.

REPEAT ALL DISC

REPEAT ONE DISC

Repeats All the Tracks on All the Discs Repeats all the tracks on the Current disc.

REPEAT ONE Repeats the current track on the Current disc.

To cancel a repeat mode, keep pressing the REPEAT Button until the REPEAT Indicator is turned off.

PROGRAMMED DISC PLAY

A CD programme can only be set when the CDs are stopped. A maximum of 40 tracks can be programmed.

ENTERING A PROGRAM

- 1. Press the MEMORY Button, the CD Display will display the word Memory and "0 0 P-00".
- Select the disc that the first track to be programmed is on using the Disc Skip Button or direct disc access button.
- 3. Select the desired track using the CD SKIP Control until the desired track is selected.

- 4. Press the MEMORY Button once again, the selected disc and track number is then stored in memory. The CD Display will change to Program edit and 0.0 P-01.
- Repeat steps 2 4 to enter additional tracks. You can store upto 40 programs in memory. The CD Display will display "FULL" when 40 programs have been stored.

Notes: If the PLAY/PAUSE Button is pressed before the MEMORY Button is pressed to store a track, the track will not be programmed, and the disc will start playing from the first selected track.

Any track can be programmed to play more than once.

If you press the STOP Button during MEMORY mode, the entire program will be erased from memory.

LISTENING TO PROGRAMMED TRACKS

Program your selection of tracks by following the procedure shown above.

Press the PLAY/PAUSE Button.

Disc play will start at the beginning of the first programmed track.

TO CLEAR THE PROGRAM MEMORY

If the disc is playing, press the STOP Button.

Press the STOP Button again. The programme will then be erased from memory.

The programme memory will also be cleared if a different source is selected, or if the power is switched off.

INTRO

Press the INTRO Key (on remote control only) and only, the first 10 seconds of each song will be played.

LISTENING TO TAPE

INSERTION AND REMOVAL OF CASSETTES

- Press the Stop/Eject Button to open the Cassette Door.
- Slide the cassette tape into the cassette door with the exposed section of tape at the bottom and the side to be played facing the front.
- Close the Cassette Door securely before starting.
- When finished, press the Stop/Eject Key to open the Cassette Door, and remove the cassette tape.

PLAYING TAPES

Either Tape Deck A or Tape Deck B can be used for playback.

- Select TAPE by pressing the Tape Button.
- O Insert your cassette tape.
- Press the Play Key to start the tape playback.
- O Use the Pause Key whenever you want to pause playback.
- O Press the Stop/Eject Key when finished.

CONTINUOUS PLAYBACK

- O Select TAPE by pressing the Tape Button.
- O Insert two cassette tapes.
- O Press the Play Key of deck B.
- Press the Pause Key followed by the Play Key of deck A.
- O Deck B will play while Deck A waits.
- O Adjust the Volume Control to the appropriate level.
- O When Tape B reaches the end and stops, Tape A starts playing back automatically.
- **O** When Tape A reaches the end, it will automatically stop.

Recording

RECORDING FROM THE RADIO

- Select the TUNER Option by pressing the Tuner Button.
- O Tune in your station or select a preset station and insert a cassette tape into tape deck A.
- O Press the Record Key and the Play Key at the same time to start recording.
- Press the Stop/Eject Key when finished.

RECORDING FROM CD

- Select the CD Option by pressing the CD Button, and insert your disc.
- O Press the Record Key and the Play Key at the same time to start recording.
- Press the CD Play/Pause Button to start the disc.
- Press the Stop/Eject Key when finished.

TAPE-TO-TAPE RECORDING (DUBBING)

NORMAL SPEED DUBBING

- O Insert a fully rewound prerecorded cassette into Tape Deck B.
- O Insert a fully rewound blank cassette tape into Tape Deck A.

- Select the TAPE Option by pressing the Tape Button.
- Press the Pause Key and then the Play and Record Keys of Tape Deck A.
- Press the Play Key of Tape Deck B. The contents of the tape in Deck B will now be copied onto the tape in Deck A.
- Adjust the Volume Control to the desired level for monitoring purposes. The recording level will be unaffected by changes in volume.
- O To stop recording, press both of the Stop/Eject Keys.

HIGH SPEED DUBBING

- O Press the High Speed Dubbing button to the ON position.
- Follow the steps described above for Normal Speed Dubbing. Monitoring is not possible.

Notes:

If the length of the tape in Deck B is shorter than that in Deck A, the Play Key of Deck B will be released automatically at the end of the tape. Tape A will continue to record until the tape reaches its end, or its Stop/Eject Key is pressed.

If the length of the tape in Deck A is shorter than that in Deck B. The Record and Play Keys of Deck A will be released automatically at the end of tape. Tape B will continue to play until the tape reaches its end, or its Stop/Eject Key is pressed.

AUTOMATIC LEVEL CONTROL (ALC)

This set is equipped with built-in Automatic Level Control (ALC) circuitry. This automatically adjusts the optimum recording level, without overloading, when recording.

Sound Controls

HEADPHONES

Headphones should have a 3.5mm diameter stereo plug and an impedance of 8-32 ohms. When headphones are connected, the speakers are automatically disconnected.

MUTE

Press the MUTE Button on the unit or remote control to mute the sound. Press MUTE again to restore the sound to the previous level.

BALANCE

This control adjusts the volume of the left and right speakers. When this control is set to the center position both speakers will have equal volume. If your normal listening position is closer to one of the two speakers, rotate the control to the left or to the right until the volume from both of the speakers sound the same at your normal listening position.

PRESETEQUALIZER

This unit is equipped with a preset equalizer which has been added to enhance your listening pleasure by adding special effects to the music.

Press the PRESET EQ button repeatedly to cycle through the following equalization modes.

CASSETTE CARE

Two common causes of trouble experienced when using cassettes are:-

- (a) Tape jamming Leading to uneven speed in playback, and
- (b) Tape tangling Where the tape wraps itself around vital parts of the mechanism.

To reduce the likelihood of these problems occurring, the following precautions should be observed.

Check that there are no loose layers of tape visible through the cassette centre window (see Fig. 1). Take up any loose layers, using a pencil or hexagonal barrelled ballpoint pen, before inserting the cassette into the machine (see Fig. 2).

If the cassette feels " tight " while performing operation shown in Fig. 2, the tape may be jamming due to " ridges " formed in the winding of the tape (visible through the centre window). These may be removed, in most cases, by fast winding of the cassette from one end to the other and back again.

Use only well-known brands of tape.

Avoid use of C-120 cassettes.

Furthermore, do not expose cassettes to direct sunlight, dust or oil, and do not touch the tape surfaces.

HEAD CLEANING

The tape heads, pinch roller and capstan require periodic cleaning. This removes particles of the metal oxide coating that wear off the tape and accumulate on these parts and impair performance. To clean the heads use a tape cleaning cassette tape available from most audio retailers.

PREVENTION AGAINST ACCIDENTAL ERASURE

To prevent a recording on a cassette tape being erased accidentally, break off the tab on the rear of the tape, as in the diagram. Now recording on this side is no longer possible. You can render this protection ineffective by covering the hole with a piece of adhesive tape.







TECHNICAL **S**PECIFICATIONS

Power supply		
AC	230V ~ 50Hz	
Radio frequency coverage		
FM	87.5 - 108 MHz	
MW	530 - 1710 kHz	
CD player		
Pick up	3-beam, Semi-conductor Laser	
Recording System	AC Bias	
General		
Speaker	8 Ohms	
Headphones	3.5mm stereo jack plug	
Dimension & Weight		
Unit dimension	340 x 280 x 335 mm (L x W x H)	
Speaker dimension	230 x 180 x 335 mm (L x W x H)	
Total unit weight	11.5 kgs	

As we continually try to improve our products the specification are subject to change without notice.