The illustrations show SC-AK340.

Panasonic®

Operating Instructions

CD Stereo System

Model No. **SC-AK340**
SC-AK240

Table of contents

Before connecting, operating or adjusting this product, please read these instructions completely.
Please keep this manual for future reference.

Note:
"EB" on the packaging indicates the United Kingdom.

Operations in these instructions are described mainly using remote control, but you can do the operations on the main unit if the controls are the same.
Unless otherwise indicated, illustrations in these operating instructions are of SC-AK340 for the United Kingdom and Continental Europe.
Your unit may not look exactly the same as illustrated.

COMPACT
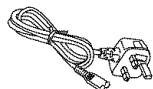**disc**
DIGITAL AUDIO

SUPPLIED ACCESSORIES

Please check and identify the supplied accessories.
Use numbers indicated in parentheses when asking for replacement parts. (As of November 2005)

1 x AC mains lead

For the United Kingdom	For Continental Europe and South Africa
(K2CT3CA00004)	(K2CQ2CA00002)
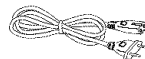
For Australia and N.Z.
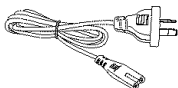
(K2CJ2DA00008)

1 x Remote Control

(N2QAHB000065)

1 x FM indoor antenna

For Europe	For others
(RSA0007-L)	(RSA0006-L)

2 x Remote control batteries

1 x AM loop antenna

(N1DAAAA00001)

1 x Antenna plug adaptor

For the United Kingdom

(K1YZ02000013)

E EB GN GC

RQTV0066-1B

Dear customer

Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.
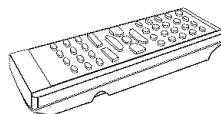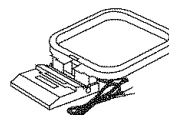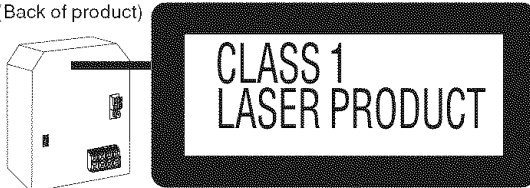
These operating instructions are applicable to the following systems.

AK340 : indicates features applicable to SC-AK340 only.
AK240 : SC-AK240 only.

System	SC-AK340	SC-AK240
Main unit	SA-AK340	SA-AK240
Speakers	SB-AK340	SB-AK240

(Back of product)

CLASS 1
LASER PRODUCT

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

CAUTION	CLASS 1M INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1 +A2/ Class 1M
VARNING	KLASS 1M OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD, BETRAKTA EJ STRÅLEN DIREKT GENOM OPTISKT INSTRUMENT.
FORSIGTIG	USYNLIG LASERSTRÅLING KLASSE 1M, NÅR LÅGET ER ÅBENT. UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.
VARO!	AVATTAESSA OLET ALTTIINA LUOKAN 1M NÄKYMÄTÖNTÄ LASERSÄTEILYÄ, ÄLÄ KATSO OPTISELLA LAITTEELLA SUORAAN SÄTEESEEN.
VORSICHT	UNSICHTBARE LASERSTRAHLUNG KLASSE 1M, WENN ABDECKUNG GEÖFFNET. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.
ATTENTION	RAYONNEMENT LASER INVISIBLE, CLASSE 1M, EN CAS D'OUVERTURE. NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D'OPTIQUE.
注意	ここを開くと不可視レーザ光が出ます。ビームを見たり、触れたりしないでください。
注意	打开时有不可见激光辐射。避免光束照射。 GB7247.1-2001/5B 类 RQLXS1071

Inside of product
Tuotteen sisällä
Produktets innside

■ Sales and Support Information
(For the United Kingdom and Republic of Ireland)

Customer Care Centre
- For UK customers: 08705 357357
- For Republic of Ireland customers: 01 289 8333
- Visit our website for product information
- E-mail: customer.care@panasonic.co.uk

Direct Sales at Panasonic UK
- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre Monday-Friday 9:00am-5:30pm. (Excluding public holidays)
- Or go on line through our Internet Accessory ordering application at www.panasonic.co.uk
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products, take a browse on our website for further details.

Caution for AC Mains Lead

(For United Kingdom)
("EB" area code model only)
For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ⟨ASTA⟩ or the BSI mark ⟨BSI⟩ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

> **CAUTION!**
> IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
> THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below.
If in any doubt please consult a qualified electrician.

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:
Blue: Neutral, Brown: Live.
As these colours 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 or Blue.
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.
WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use
Remove the connector cover.

How to replace the fuse
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A	Figure B
	Fuse cover
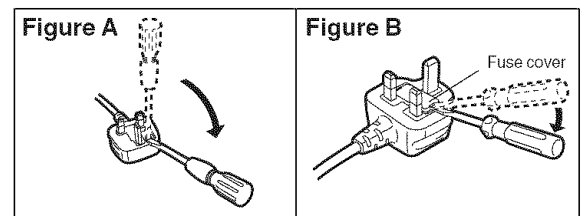
2. Replace the fuse and close or attach the fuse cover.

Figure A	Figure B
Fuse (5 ampere)	Fuse (5 ampere)
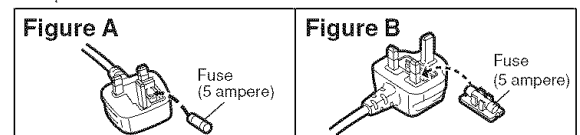
Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)

This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union
If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union
This symbol is only valid in the European Union.
If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

For South Africa

THIS UNIT IS INTENDED FOR USE IN TROPICAL CLIMATES.

For others

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

TÄMÄ LAITE ON TARKOITETTU KÄYTETTÄVÄKSI LEUDOSSA ILMASTOSSA.

DETTE APPARATET ER BEREGNET TIL BRUK UNDER MODERATE KLIMAFORHOLD.

Placement of speakers

AK340

Place the front speakers so that the tweeter is on the inside.

Tweeter
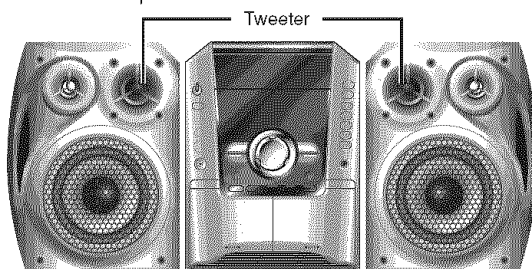
AK240

Speakers are designed identically so that no left or right channel orientation is necessary.
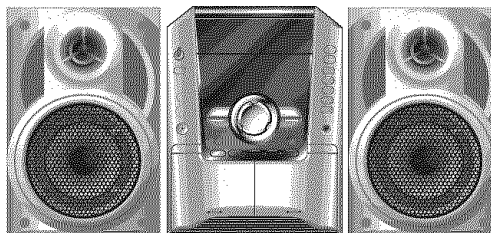
You cannot take the front net off the speakers.

Use only the supplied speakers.
The combination of the main unit and speakers provide the best sound. Using other speakers can damage the unit and sound quality will be negatively affected.

Note:
• Keep your speakers at least 10mm away from the system for proper ventilation.
• These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.
• You can damage your speakers and shorten their useful life if you play sound at high levels over extended periods.
• Reduce the volume in the following cases to avoid damage.
  – When playing distorted sound.
  – When adjusting the sound quality.

Caution
• Use the speakers only with the recommended system. Failure to do so can damage the amplifier and speakers, and can cause fire. Consult a qualified service person if damage occurs or if a sudden change in performance is apparent.
• Do not attach these speakers to walls or ceilings.

Step 1 - Making the connections

Connect the AC mains lead only after all other connections have been made.

1 Connect the speaker cords.

AK340

Grey Red

Connect the left (L) side in the same way

Red (+)

Grey (+)

⊕

⊖

HIGH LOW (3Ω) (3Ω)
HIGH LOW (3Ω) (3Ω)
Ⓡ Ⓛ

Blue   Black

Blue (−)

Black (−)

AK240

Red

Connect the left (L) side in the same way

Red (+)

⊕

⊖

(Ω) (3Ω)
Ⓡ Ⓛ

Black

Black (−)
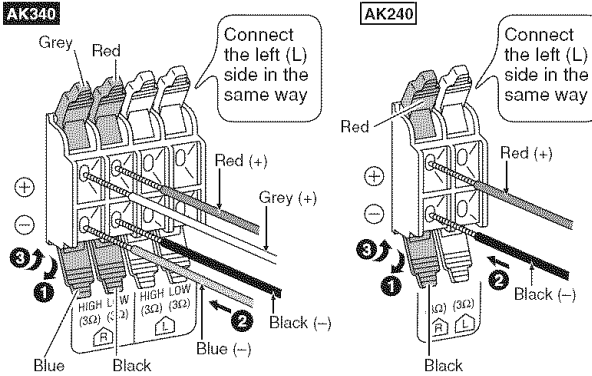
2 Connect the AM loop antenna.

For Europe

AM ANT

EXT LOOP

Stand the antenna up on its base.

For others

AM ANT

EXT LOOP

(R)   (L)

To household mains socket
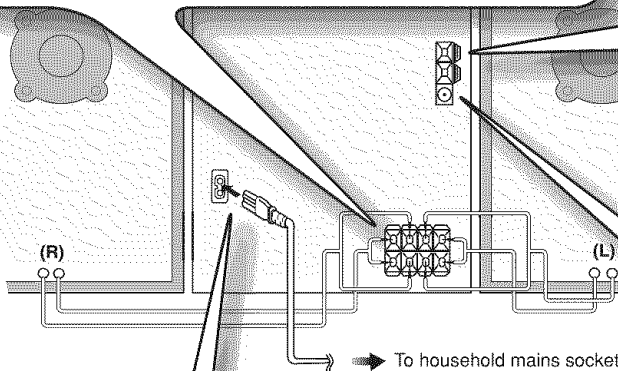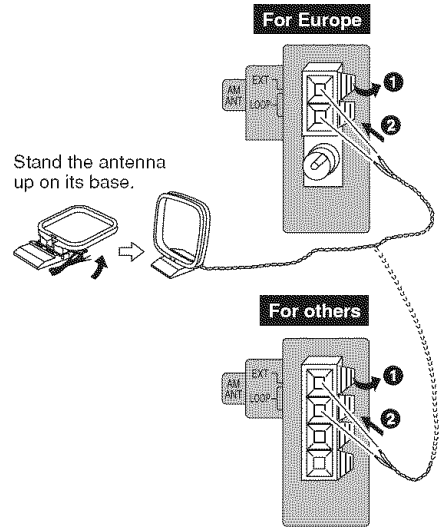
3 Connect the FM indoor antenna.

Tape the antenna where reception is best.

For Europe

FM ANT (75Ω)

Adhesive tape

For others

FM ANT (75Ω)

GND

Adhesive tape
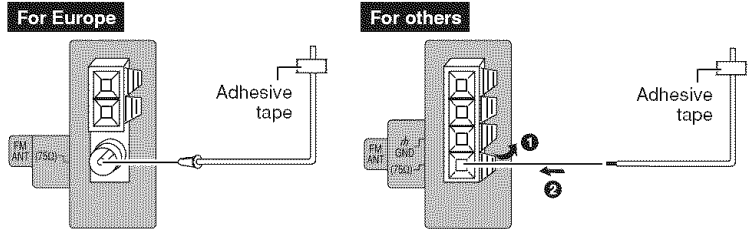
4 Connect the AC mains lead.

> FOR THE UNITED KINGDOM ONLY
> READ THE CAUTION FOR THE AC MAINS LEAD
> ON PAGE 2 BEFORE CONNECTION.

Insertion of connector
Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing. However there is no problem using the unit.

Appliance inlet ─── Connector
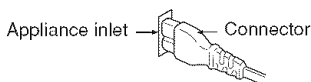
For your reference
To save power when the unit is not to be used for a long time, unplug it from the household mains socket. You will need to reset some memory items after plugging in the unit.

Note:
The included AC mains lead is for use with this unit only. Do not use it with other equipment.

Use outdoor antenna if radio reception is poor.

Note:
Disconnect the outdoor antenna when the unit is not in use. Do not use the outdoor antenna during a lightning storm.

FM outdoor antenna

AM outdoor antenna

FM outdoor antenna (not included)

75 Ω coaxial cable
(not included)

For Europe
Rear panel of this unit

For the United Kingdom
Antenna plug adaptor
(included)

For others
Rear panel of this unit

① ━ ▭
30 mm

② ━ Shield braid

15 mm ━ Core wire

③

AM outdoor antenna (not included)

5-12 m

For Europe
Rear panel of this unit

For others
Rear panel of this unit

AM loop antenna
(included)

• Disconnect the FM indoor antenna.
• The antenna should be installed by a competent technician.

• Run a piece of vinyl wire horizontally across a window or other convenient location.
• Leave the loop antenna connected.

Step 2 - Inserting batteries into the remote control

AA/R6/LR6

⊖ ⊕ ❶
⊖ ⊕ ❷
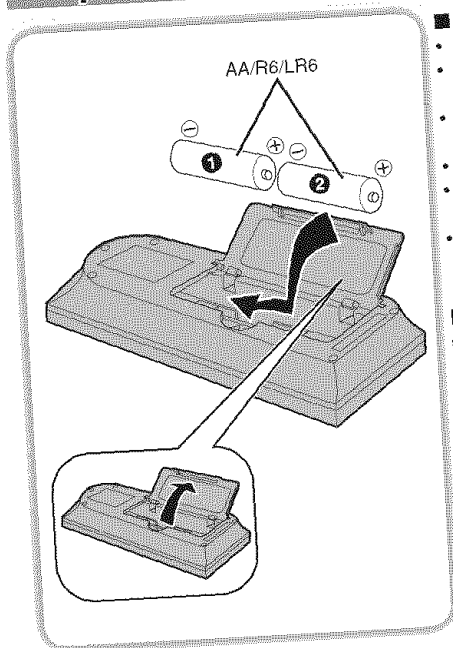
■ Batteries
• Insert so the poles (+ and −) match those in the remote control.
• Remove if the remote control is not going to be used for a long period of time. Store in a cool, dark place.
• Replace if the unit does not respond to the remote control even when held close to the front panel.
• Do not use rechargeable type batteries.
• Mishandling of batteries in the remote control can cause electrolyte leakage, which may cause a fire.
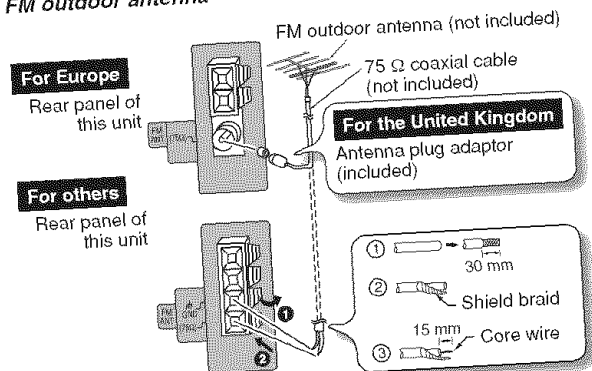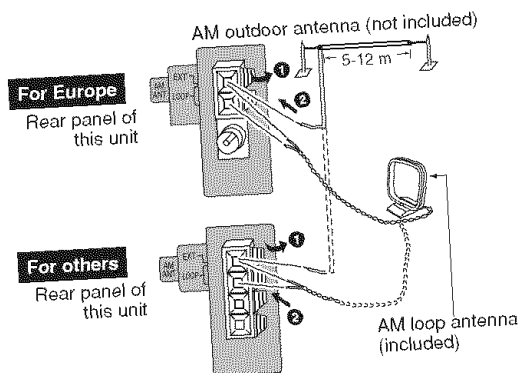• If electrolyte leaks from the batteries, consult your dealer. Wash thoroughly with water if electrolyte comes in contact with any part of your body.

Do not:
• mix old and new batteries.
• use different types at the same time.
• heat or expose to flame.
• take apart or short circuit.
• attempt to recharge alkaline or manganese batteries.
• use batteries if the covering has been peeled off.
• put heavy objects on the remote control.
• spill liquids onto the remote control.

■ Use
Aim at the remote control sensor, avoiding obstacles, at a maximum range of 7 m directly in front of the unit.
Refer to page 6 for the remote control sensor position.

Step 3 - DEMO function
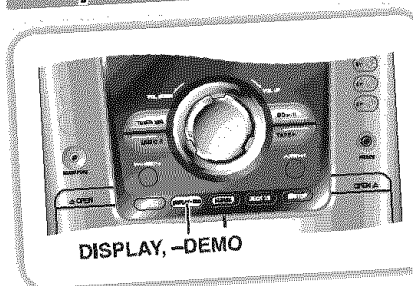
When the unit is first plugged in, a demonstration of its functions may be shown on the display.
If the demo setting is off, you can show a demonstration by selecting "DEMO ON".

Press and hold [DISPLAY, −DEMO].
The display changes each time the button is held down.
NO DEMO (off) ↔ DEMO ON (on)
While in standby mode, select "NO DEMO" to reduce power consumption.

Note:
DEMO function cannot be turned on when Dimmer is on.

DISPLAY, −DEMO

Main unit

Refer to the numbers in parentheses for page reference.

AC supply indicator [AC IN]
This indicator lights when the unit is connected to the AC mains supply.

① Standby/on switch [⏻/I] (10, 18)
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

Multiple discs change (8)

Display panel

② Volume control

③ Tuner/Band selection (13)

④ Music port selection (16)

Music port jack (16)

Deck 1 open (11)

Disc skip/search, tape fast-forward/rewind, tune/preset channel selection, time adjustment (11)

Record (12, 16)

Display, demonstration (5)

⑤ H.BASS selection (15)

Deck 1 cassette holder (11)

Remote control signal sensor

Disc trays

Disc tray open/close (7)

Single disc change (8)

Disc direct play (8)

⑥ Disc play/pause (7)

Headphone jack (PHONES)
Avoid listening for prolonged periods of time to prevent hearing damage.
Plug type: 3.5 mm stereo (not included)

⑦ Tape play (11)

Deck 2 open (11)

Stop (11)

Deck selection (11)

Deck 2 cassette holder (11)

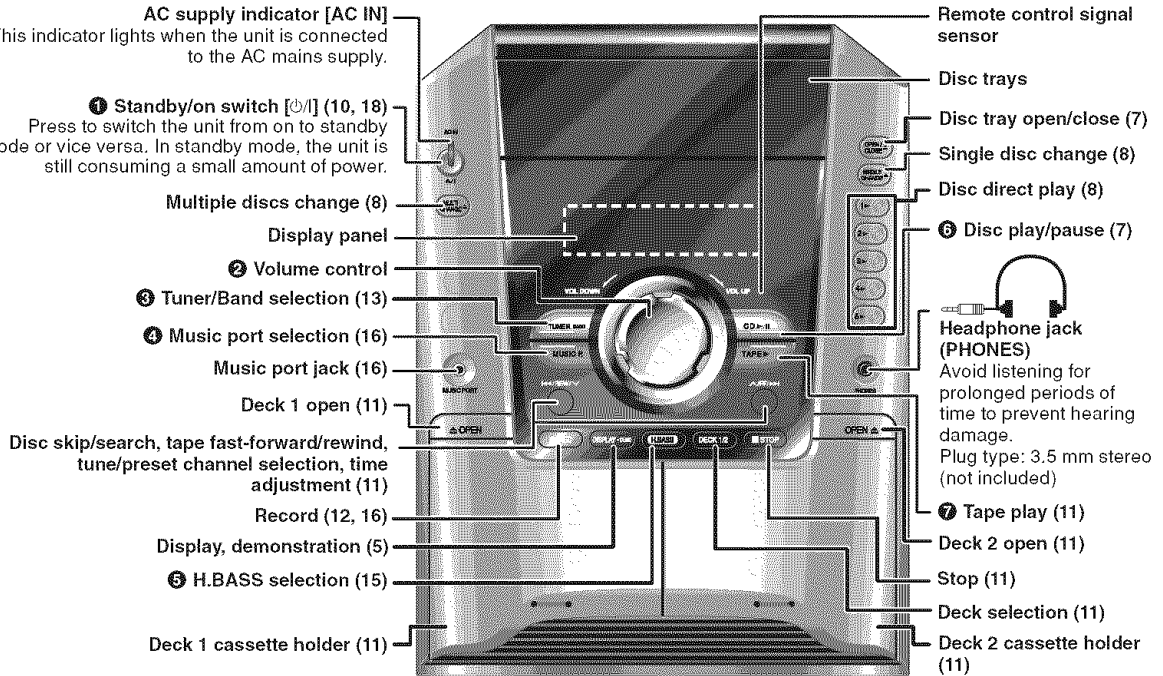| AK340	To select the desired display during play mode.
	Each time you press the button: Normal → Reflection → (off)

Remote control

Buttons such as ① function the same as the controls on the main unit.

**① **

Sleep timer (15), Auto off

Disc (7)

Program (8, 13)

Play mode (7, 11, 13)

Repeat (9)

Delete (9)

③

④

Album selection (7)

Intro selection (9)

Marker memory/recall (9)

Display (8, 13)

⑤

Dimmer, Play timer/record timer (14)

Clock/timer (14)

Numeric, characters (7, 9)

⑥

Stop/program clear (7, 9)

⑦

②

Disc skip/search, tape fast-forward/rewind, tune/preset channel selection, time adjustment, cursor (7, 9, 12, 13, 14)

Enter (8)

Title search (9)

Muting

Preset EQ (15)

SLEEP –AUTO OFF

This auto off function allows you to turn off the unit in **disc or tape** mode only after left unused for 10 minutes.
• Press and hold [–AUTO OFF] to activate the function.
• Press and hold [–AUTO OFF] again to cancel.
• The setting is maintained even if the unit is turned off.

DIMMER –PLAY/REC

To dim the display panel.

MUTING

To mute the sound.
• Press the button to activate.
• Press again to cancel.

OPEN/CLOSE

DISC

PLAY MODE

Numeric
buttons

►/II, CD

■, CLEAR

ALBUM (‒ or ‒)

I◄◄, REW/∨,
►►I, ∧/FF

Basic play

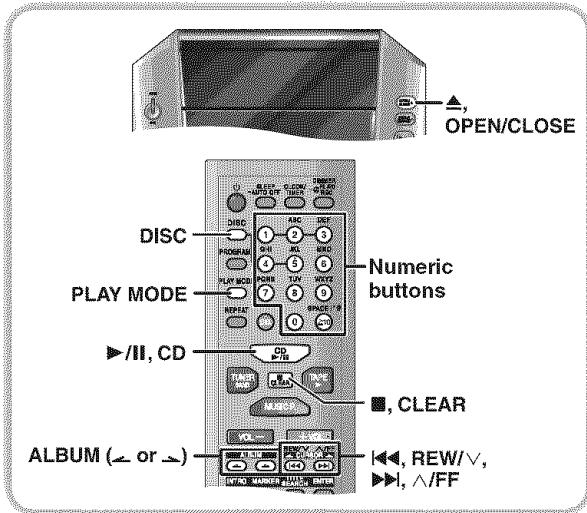**1** **Press [▲, OPEN/CLOSE] on the main unit to open the tray.**
The unit turns on, load a disc in the current tray with the label facing up.
Press [▲, OPEN/CLOSE] to close the tray.

2 **Press [►/II, CD] to start play.**
You can also press [DISC] and then [1] ~ [5] to select and play the other loaded discs.

Current disc indicator
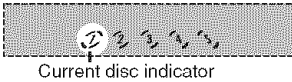
To	Action
stop play	Press [■, CLEAR] during play. **(MP3) (WMA)** Display when in the stop mode: Example: "MP3" indicates the disc contains MP3 files. Total number of albums / Total number of tracks
pause play	Press [►/II, CD] during play. Press again to resume play.
skip album	**(MP3) (WMA)** Press [ALBUM (‒ or ‒)] to select the desired album during play or when in stop mode. Display when selecting in stop mode (example): Current album Number of tracks in current album • This function does not work during 1-DISC RANDOM and ALL-DISC RANDOM mode. It is applicable only during program stop mode.

skip tracks	Press [I◄◄, REW/∨] or [►►I, ∧/FF]. • During random play (➡ see below, "Play Mode function"), you cannot skip to tracks which have been played. **(MP3) (WMA)** During 1-ALBUM and 1-ALBUM RANDOM mode, track skipping can only be done within the current album.
search through tracks	**(CD)** Press and hold [I◄◄, REW/∨] or [►►I, ∧/FF] during play or pause to search. • During program play (➡ page 8), or random play (➡ see below, "Play Mode function"), you can search only within the track.

Play Mode function   **(CD) (MP3) (WMA)**

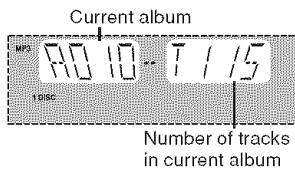You can listen to specific discs and tracks.

Preparation
Select and play your desired disc.

Press [PLAY MODE] to select the desired mode.

Mode	To play
1-DISC 1 DISC	one selected disc.
1-DISC RANDOM 1 DISC RND	one selected disc randomly.
ALL-DISC ALL DISC	all loaded discs in succession from the selected disc to the final disc. Example: 4→5→1→2→3.
ALL-DISC RANDOM ALL DISC RND	all loaded discs randomly.
1-SONG 1-SONG	one selected track on the selected disc.
(CD)	Press the numeric buttons to select the track in the current disc. Play starts from the selected track.
(MP3) (WMA)	Press [ALBUM (‒ or ‒)] to select the album. Press the numeric buttons to select the track in the current album. Play starts from the selected track.
1-ALBUM 1-ALBUM **(MP3) (WMA)**	one selected album on the selected disc. Press [ALBUM (‒ or ‒)] to select the album.
1- ALBUM RANDOM 1-ALBUM RND **(MP3) (WMA)**	all tracks in one selected album randomly. Press [ALBUM (‒ or ‒)] to select the album.

When playback ends
The current play mode will be retained in memory until it is changed even if the unit is turned off.

Note:
You cannot use program mode together with "Play Mode function".

DISC
PROGRAM — Numeric
REPEAT — buttons
DEL
▶/II, CD
ALBUM (◢ or ◣) — CURSOR (◢ or ◣),
I◀◀, REW/∨,
▶▶I, ∧/FF
INTRO — ENTER
MARKER — TITLE SEARCH
DISPLAY
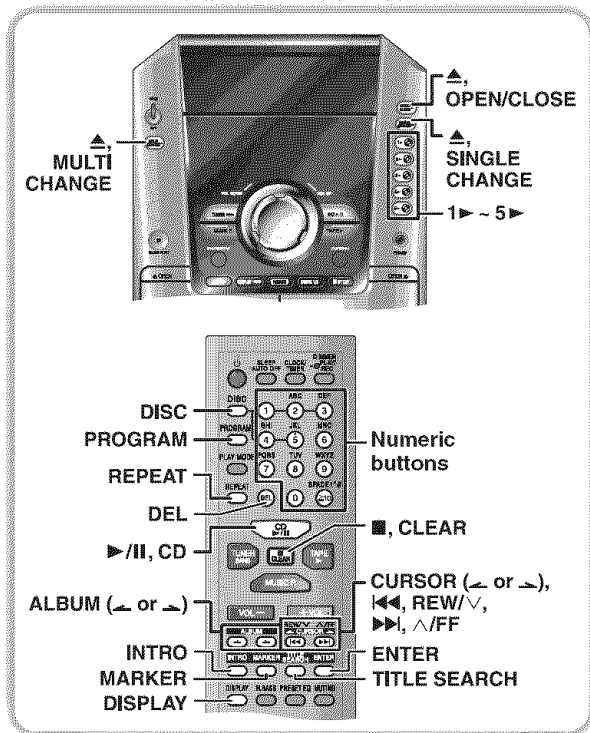
Changing multiple discs (MULTI CHANGE)

By main unit only

1 Press [▲, MULTI CHANGE] to open the trays.

2 Press the button repeatedly to check and change multiple discs.

Note:
• The tray with a disc being played will not open.
• If the player is stopped, all trays will open. To close the remaining trays simultaneously, press [▲, OPEN/CLOSE].

Changing a single disc (SINGLE CHANGE)

By main unit only

While one disc is playing, you can change the discs in other trays.

1 Press [▲, SINGLE CHANGE].

2 Press [1 ▶ ~ 5 ▶] to select the desired tray.

3 Change the disc.

4 Press [▲, SINGLE CHANGE] again to close the tray.

Checking the track information   (CD) (MP3) (WMA)

You can select a desired disc display mode.
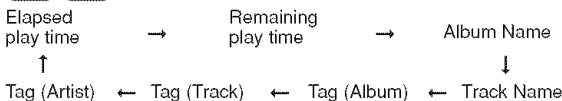
AK340 AK240
Press [DISPLAY] during play or pause.

AK240
Press [DISPLAY, –DEMO] on the main unit during play or pause.

(CD)
Elapsed play time ↔ Remaining play time

(MP3) (WMA)

| Elapsed play time | → | Remaining play time | → | Album Name |

Tag (Artist) ← Tag (Track) ← Tag (Album) ← Track Name

Note:
(CD)
• When track number 25 or greater is playing, remaining play time display shows "– –:– –".

(MP3) (WMA)
• When a title is longer than 9 characters, it will scroll across the display. The scrolling will start after every 3 seconds.
• "NO TAG" is displayed if titles with tags have not been entered.
• Maximum number of displayable characters: approximately 32
• This unit can display album, track and artist name with WMA tags and MP3 ID3 tags (version 1.0 and 1.1).
• Titles containing text data that the unit does not support cannot be displayed.
• ID3 is a tag embedded in MP3 track to provide information about the track.
• Titles entered with 2-byte code cannot be displayed correctly on this unit.

Advanced play

Program play   (CD) (MP3) (WMA)

This function allows you to program up to 24 tracks.

(CD)

1 Press [▶/II, CD] and then [■, CLEAR].

2 Press [PROGRAM].
"PGM" appears.

3 Press [DISC] and then [1] ~ [5] to select the disc.

4 Press the numeric buttons to select your desired track.
Repeat steps 3 to 4 to program other tracks.

5 Press [▶/II, CD] to start play.

(MP3) (WMA)

1 Press [DISC] and then [1] ~ [5] to select the disc.

2 Press [■, CLEAR].

3 Press [PROGRAM].

4 Press [ALBUM (◢ or ◣)] to select your desired album.
To select an album directly, press the numeric buttons after pressing [ALBUM (◢ or ◣)].

5 Press [I◀◀, REW/∨] or [▶▶I, ∧/FF] to select the track.
To select a track directly, press the numeric buttons after pressing [I◀◀, REW/∨] or [▶▶I, ∧/FF].

6 Press [ENTER].
Repeat steps 4 to 6 to program other tracks.

7 Press [▶/II, CD] to start play.

For two-digit track, press [≧10] once then the two digits.
For three-digit track, press [≧10] twice then the three digits.

To	Action
cancel program mode	Press [PROGRAM] in the stop mode.
replay the program	Press [PROGRAM] then [▶/II, CD] in the stop mode.

To	Action
add to the program	(CD) Repeat steps 3 to 4 in the stop mode. (MP3) (WMA) Repeat steps 4 to 6 in the stop mode.
check program contents	Press [I◄◄, REW/∨] or [►►I, ∧/FF] when "PGM" is displayed in the stop mode. (CD) The track number, program order and disc number are displayed:

Track number   Program order

(MP3) (WMA)
The program order is displayed followed by the album number and track number.

clear the last track	Press [DEL] in the stop mode.
clear all programmed tracks	Press [■, CLEAR] in the stop mode. "CLEAR ALL" is displayed. Within 5 seconds, press the button again to clear all tracks.

Note:
• You cannot program CD-DA together with MP3 or WMA tracks.
(MP3) (WMA)
• The program memory is cleared when you change a disc or open the disc tray.
• You cannot program more than one disc for MP3 or WMA.

Repeat play   (CD) (MP3) (WMA)

You can repeat program play or other selected play mode.
Press [REPEAT].
"⟳" is displayed.

To cancel
Press [REPEAT] again.
"⟳" is cleared.

Note:
You can use repeat mode with "Program play" (➡ page 8) and "Play Mode function" (➡ page 7).

Marking a track   (CD) (MP3) (WMA)

Enables you to mark one track for each loaded disc so that you can directly play the track later.

During play, press and hold the [MARKER] until "STORING" blinks on the display to mark your favourite track.

Press [MARKER] during play or stop mode to recall and play a marked track.

Note:
• "NO MARKER" indicates that the marker in the current disc is empty.
• The marker memory is cleared when you open the disc trays except for the current disc which is in play or pause mode.
• This function does not work during any random/program mode.

Advanced function ((MP3) (WMA) only)

Album scan

This function allows you to find an album by listening to the first track of all albums in the current disc for 10 seconds each.

1 Press [►/II, CD] and then [■, CLEAR].

2 Press [INTRO] to start the intro function.

3 While your desired album is playing, press [►/II, CD]. Intro mode is cancelled and the playback continues.

INTRO function is cancelled after playing the first track in the last album.
To stop during the process, press [INTRO] or [■, CLEAR].
Note:
This function does not work during any random/program mode.

Album/Track title search

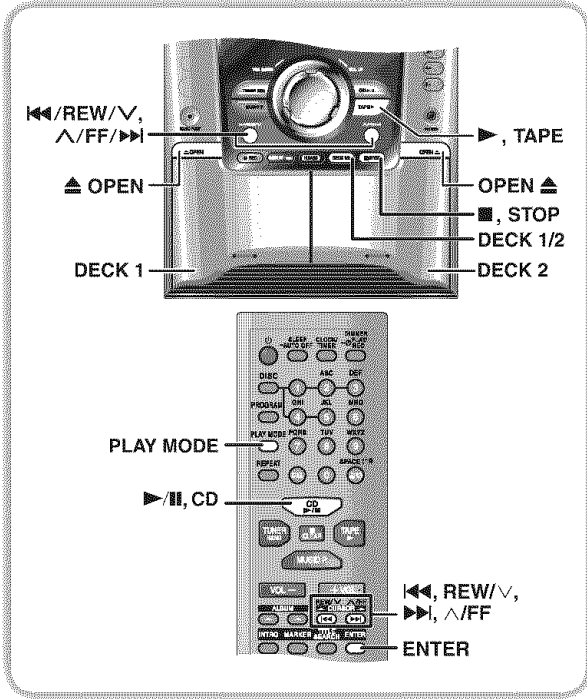This function enables you to search your desired album or track.

1 Press [►/II, CD] and then [■, CLEAR].

2 For album title search, press [TITLE SEARCH] once. For track title search, press [TITLE SEARCH] twice.

3 Press the numeric buttons repeatedly to select your desired character then press [CURSOR ➞] to key in the next character.
• You can enter up to 8 characters.
• To edit, press [CURSOR (⬅ or ➞)] to revise any characters.
• To delete, move the cursor over the character and then press [DEL].

Numbered buttons	Characters	Numbered buttons	Characters
1	1	6	M N O 6
2	A B C 2	7	P Q R S 7
3	D E F 3	8	T U V 8
4	G H I 4	9	W X Y Z 9
5	J K L 5	0	0
≧10	*space* ! " # $ % & ' ( ) * + , − . / : ; = ? _ `		

You can search for "<" or ">" by entering "(" or ")".
The special characters will be displayed as below:

Characters	Main unit display	Characters	Main unit display
!		'	
"		−	
#		.	
$		/	
%		:	
&		;	
'		=	
(		?	
)		_	
*		`	
+			

Some characters may not be displayed correctly due to the recording format/software used.

RQTV0066

K◄◄/REW/∨,
∧/FF/►►I

▲ OPEN

DECK 1

►, TAPE

OPEN ▲
■, STOP
DECK 1/2
DECK 2

PLAY MODE

►/II, CD

I◄◄, REW/∨,
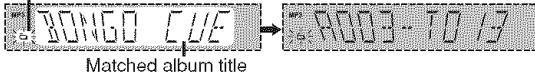►►I, ∧/FF

ENTER

4 Press [ENTER].
Press [I◄◄, REW/∨] or [►►I, ∧/FF] to search for previous or next match.

The match title is displayed.

Album title search

Blinks to indicate album title search mode

Matched album title

Track title search

Matched track title

Blinks to indicate track title search mode

5 Press [►/II, CD] to start play from the album/track found.

Note:
This function does not work during any random/program mode.

NOTE on CDs

- This unit can access up to 99 tracks.
- Choose disc with this mark.

COMPACT
DIGITAL AUDIO

- This unit can play MP3 or WMA files and CD-DA format audio CD-R/RW that have been finalized.
- It may not be able to play some CD-R/RW due to the condition of the recording.
- Do not use irregularly shaped disc.
- Do not use disc with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.
- Do not attach extra labels or stickers on the disc.
- Do not write anything on the disc.

Using DualDiscs

The "CD" sides of DualDiscs do not meet the CD-DA standard so it may not be possible to play them on this unit.

Not doing the following will cause damage to the unit.
- Press [⏻/I] to turn off the unit and remove the mains plug only after all the displays have disappeared.
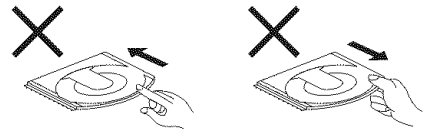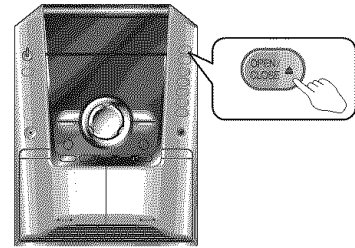
- Always press [▲, OPEN/CLOSE] to insert or remove a disc.
- Do not push or pull out the tray by hand as this will cause an accident.
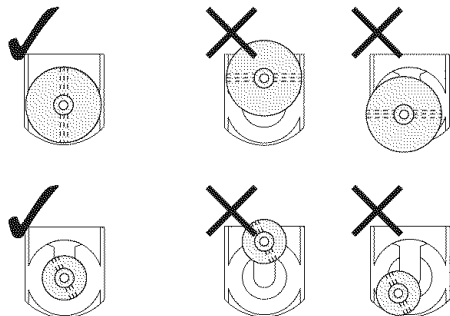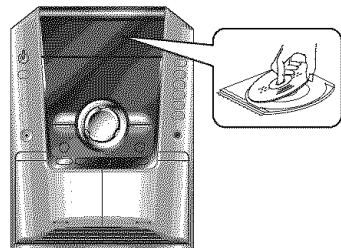
- Place the disc correctly label-up as shown in the diagram.
- Insert one disc into the tray.

NOTE on MP3 or WMA

- Files are treated as tracks and folders are treated as albums.
- This unit can access up to 999 tracks, 255 albums and 20 sessions.
- Disc must conform to ISO9660 level 1 or 2 (except for extended formats).
- To play in a certain order, prefix the folder and file names with 3-digits numbers in the order you want to play them.

(MP3)

When "NOT MP3/ERROR1" appears on the display, an unsupported MP3 format is being played. The unit will skip that track and play the next one.

(WMA)

- Noise may occur when playing WMA files.
- This unit cannot play WMA files that are copy protected.

Limitations on MP3 or WMA play

- If you have recorded MP3 or WMA on the same disc as CD-DA, only the format recorded in the first session can be played.
- Some MP3 or WMA may not be played due to the condition of the disc or recording.
- Due to differences and variations of WMA tags, some files may not play or display the tags' information properly.
- Recordings will not necessarily be played in the order you recorded them.

> MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

> Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.
>
> WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.
>
> Designed for
> **Windows**
> Media™

Cassette tape – Play and record

The buttons described for "Cassette tape – Play and record" are mainly for the main unit unless indicated otherwise.

Basic play

You can use either DECK 1 or DECK 2 for tape playback.

Use normal position tapes.
High position and metal position tapes can be played, but the unit will not be able to do full justice to the characteristics of these tapes.

1 Press [▶, TAPE].
The unit turns on.
If a cassette was loaded, play starts automatically (One touch play).

2 Press [⏏ OPEN] for DECK 1 or [OPEN ⏏] for DECK 2 and insert the cassette.
Insert with the side to be played facing towards you and the exposed tape facing down. Close the holder by hand.

Front side
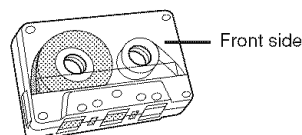
3 Press [▶, TAPE] to start play.

To	Action
stop tape playback	Press [■, STOP].
fast-forward and rewind	Press [I◄◄/REW/∨] or [∧/FF/►►I].
select between loaded decks	Press [DECK 1/2] (remote control : [PLAY MODE]).

Note:
- Tape playback is momentarily interrupted if you open the other deck.
- Tapes exceeding 100 minutes are thin and can break or get caught in the mechanism.
- Tape slack can get caught up in the mechanism and should be wound up before the tape is played.
- Endless tapes can get caught up in the deck's moving parts if used incorrectly.

TUNER, BAND

►/❚❚, CD

▲ OPEN

►, TAPE

●, REC

OPEN ▲

■, STOP

DECK 1

DECK 2

DISC

PROGRAM

PLAY MODE

Numeric
buttons

TUNER, BAND

ALBUM (◢ or ◣)

I◀◀, REW/∨,
▶▶I, ∧/FF

DISPLAY

Recording

Selection of tapes for recording
Use normal position tapes.
High position and metal position tapes can be used, but this unit will not be able to record or erase them correctly.

Preparation
Wind up the leader tape so recording can begin immediately.

1 Press [OPEN ▲] for DECK 2 and insert the cassette to be recorded.
Insert with the side to be recorded facing towards you and the exposed tape facing down.

2 Select the source to be recorded.
Radio recording:
Tune in the station. (➡ page 13)
Disc recording:
① Insert the disc(s) you want to record.
Press [►/❚❚, CD] and then [■, STOP].
② Prepare the desired disc recording mode.

To	Action
record programmed tracks	(CD) Perform steps 2 to 4 in "Program play" (➡ page 8).
	(MP3) (WMA) Perform steps 3 to 6 in "Program play" (➡ page 8).

By remote control only

record specific discs/tracks	1) Press [DISC] and then [1] ~ [5] to select the disc. Ensure disc is stopped. 2) Press [PLAY MODE] to select the desired mode (➡ page 7). 3) (MP3) (WMA) For 1-ALBUM mode and 1-SONG mode: Press [ALBUM (◢ or ◣)] to select the album. (CD) (MP3) (WMA) For 1-SONG mode: Press [I◀◀, REW/∨] or [▶▶I, ∧/FF] to select the track.

Tape-to-tape recording:
① Press [►, TAPE] and then [■, STOP].
② Press [▲ OPEN] for DECK 1 and insert the cassette to record.

3 Press [●, REC] to start recording.

Other basic operations

To	Action
stop recording	Press [■, STOP].
record on the other side of the tape	Turn the cassette over and press [●, REC].
erase a recorded sound	1) Press [►, TAPE] and then [■, STOP]. 2) Insert the recorded tape into DECK 2. Ensure there is no tape in DECK 1. 3) Press [●, REC].

Your attention is drawn to the fact that recording pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

Note:
• Changes to volume and sound adjustments do not affect recording.
• You cannot open DECK 1 while recording.
• You cannot fast-forward or rewind one deck while recording with the other.

Erasure prevention

The illustration shows how to remove the tabs to prevent recording. To record on the tape again, cover as shown.

Side A

Tab for side B   Tab for side A
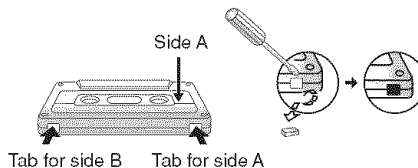
To re-record
Normal cassette

Adhesive tape

Manual tuning

1 Press [TUNER, BAND] to select "FM" or "AM".

2 Press [PLAY MODE] to select "MANUAL".

3 Press [I◄◄, REW/∨] or [►►I, ∧/FF] to select the frequency of the required station.

- " ST " is displayed when a stereo FM broadcast is being received.
- "TUNED" is displayed when a radio station is tuned.

To tune automatically
Press and hold [I◄◄, REW/∨] or [►►I, ∧/FF] until the frequency starts changing rapidly. The unit begins auto tuning, stopping when it finds a station.
- Auto tuning may be interrupted when there is excessive interference.
- To cancel auto tuning, press [I◄◄, REW/∨] or [►►I, ∧/FF] once again.

To improve FM sound quality

Press and hold [PLAY MODE] to display "MONO".

To cancel
Press and hold [PLAY MODE] again until "MONO" disappear.
- MONO is also cancelled if the frequency is changed.
- Turn off "MONO" for normal listening.

RDS broadcasting (For Europe)

This unit can display the text data transmitted by the radio data system (RDS) available in some areas.
If the station you are listening to is transmitting RDS signals, "RDS" will light up on the display.

[AK340] **[AK240]**
Press [DISPLAY] to display:

[AK240]
Press [DISPLAY, –DEMO] on the main unit to display:

Station name → Program Type → Frequency display
   (PS)   (PTY)

Program type displays			
NEWS	VARIED	FINANCE	COUNTRY
AFFAIRS	POP M	CHILDREN	NATIONAL
INFO	ROCK M	SOCIAL A	OLDIES
SPORT	M-O-R- M※	RELIGION	FOLK M
EDUCATE	LIGHT M	PHONE IN	DOCUMENT
DRAMA	CLASSICS	TRAVEL	TEST
CULTURE	OTHER M	LEISURE	ALARM
SCIENCE	WEATHER	JAZZ	

※ M-O-R- M = "Middle-of-the-Road music"
Note:
RDS displays may not be available if reception is poor.

AM allocation setting (For South Africa)

By main unit only
This system can also receive AM broadcasts allocated in 10 kHz steps.
To change the step from 9 kHz to 10 kHz

1 Press and hold [TUNER, BAND].
After a few seconds the display changes to a flashing display of the current minimum frequency.

2 Continue to hold down [TUNER, BAND].
- When the minimum frequency changes, release the button. To return to the original step, repeat the above steps.
- After changing the setting, previously preset frequency will be cleared.

Memory preset

Up to 15 stations each can be set in the FM and AM bands.

Preparation
Press [TUNER, BAND] to select "FM" or "AM".

Automatic presetting

1 Tune to the frequency where pre-setting is to begin.

2 Press and hold [PROGRAM] to start presetting.

The tuner presets all the stations it can receive into the channels in ascending order. When finished, the last station memorized is tuned in.

Manual presetting

1 Press [PLAY MODE] to select "MANUAL".

2 Press [I◄◄, REW/∨] or [►►I, ∧/FF] to tune to the required station.

3 Press [PROGRAM].

4 Press the numeric buttons to select a channel.
For channels 10 to 15 press [≧10], then the two digits.
The station occupying a channel is erased if another station is preset in that channel.

Selecting a preset station

Press the numeric buttons to select the channel.
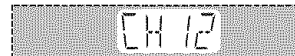
OR

1 Press [PLAY MODE] to select "PRESET".

2 Press [I◄◄, REW/∨] or [►►I, ∧/FF] to select the channel.

SLEEP ———— CLOCK/TIMER
————————— –⊙PLAY/REC
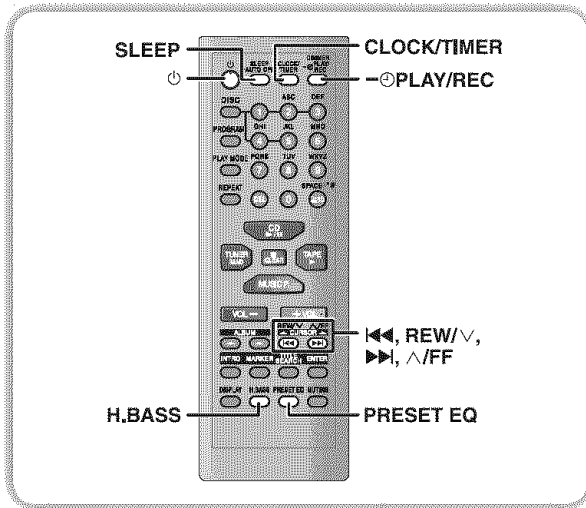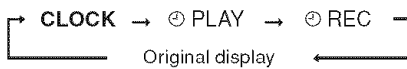
|◀◀, REW/∨,
▶▶|, ∧/FF

H.BASS ———— PRESET EQ

Setting the clock

This is a 24-hour clock.

1 Press [CLOCK/TIMER] to select "CLOCK".
Each time you press the button:

```
  ┌→ CLOCK  →  ⊙ PLAY  →  ⊙ REC ┐
  └─────────  Original display  ←──┘
```

2 (Within 8 seconds or so)
Press [|◀◀, REW/∨] or [▶▶|, ∨/FF] to set the time.

3 Press [CLOCK/TIMER] to finish setting the time.

Displaying the clock
Press [CLOCK/TIMER] once when the unit is on or in standby mode.
The time is displayed for a few seconds.

Note:
Reset the clock regularly to maintain accuracy.

Using the play or record timer

You can set the timer to come on at a certain time to wake you up (play timer) or to record from the radio or music port source (record timer).
Play timer and record timer cannot be used together.

Turn the unit on and set the clock.

Timer	Action
Play timer	Prepare the music source you want to listen to; cassette (DECK 2 has the priority), disc number (1~5), radio or music port source, and set the volume.
Record timer	Check the cassette's erasure prevention tabs (➡ page 12), insert the cassette in DECK 2 and tune to the radio station (➡ page 13) or select the music port source (➡ page 16).

1 Press [CLOCK/TIMER] to select the timer function.
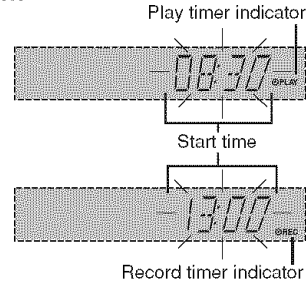Each time you press the button:

```
  ┌→ CLOCK  →  ⊙ PLAY  →  ⊙ REC ┐
  └─────────  Original display  ←──┘
```

⊙PLAY : to set the play timer
⊙REC : to set the record timer
(Proceed to the next step **within 8 seconds**)

2 Press [|◀◀, REW/∨] or [▶▶|, ∧/FF] to set the starting time.

Play timer indicator

Start time

Record timer indicator

3 Press [CLOCK/TIMER] to confirm.

4 Repeat steps 2 to 3 to set the finishing time.

Finish time
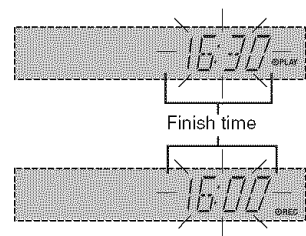
To activate the timer

5 Press and hold [–⊙PLAY/REC] to turn on your desired timer.

```
  ┌→ ⊙ PLAY  →  ⊙ REC ┐
  └───  no display (off) ←──┘
```
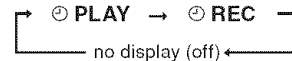
6 Press [⏻] to turn off the unit.
The unit must be off for the timers to operate.

Other basic operations

To	Action
change the settings	Repeat steps 1 to 4 and 6 (➡ see above).
change the source or volume	1) Press and hold [–⊙PLAY/REC] to clear the timer indicator from the display. 2) Make changes to the source or volume. 3) Do steps 5 to 6 (➡ see above).
check the settings	Press [CLOCK/TIMER] repeatedly to select ⊙PLAY or ⊙REC.
cancel	Press and hold [–⊙PLAY/REC] to clear the timer indicators from the display.

If you use the unit after the timers are set
After using, check that the correct tape/disc are loaded before turning the unit off.

Note:
- The play timer will start at the preset time with volume increasing gradually to preset level.
- The record timer will start 30 seconds before the set time with the volume muted.
- The timer comes on at the set time everyday if the timer is on.
- The unit must be in the standby mode for the timer to function.
- If you turn the unit off and on again while a timer is functioning, the finish time setting will not be activated.
- If MUSIC PORT is selected as the source when the timer comes on, the system turns on and engages MUSIC PORT as the source. If you wish to playback or record from the portable audio equipment, just activate the equipment's play mode and increase the volume. (See the portable audio equipment's instruction manual.)

Using the sleep timer

This function enables you to turn off the unit automatically after the set time.

Press [SLEEP] to select your desired time.

┌→SLEEP 30 →SLEEP 60→SLEEP 90┐
└── SLEEP OFF ←SLEEP 120 ←────┘
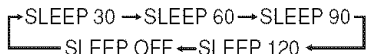
Sleep timer indicator

To cancel
Press [SLEEP] to select "SLEEP OFF".

Changing the remaining time
Press [SLEEP] to show the remaining time and press [SLEEP] again to select your desired time.

Note:
- The play and sleep timer or the record and sleep timer can be used together.
- The sleep timer always has priority. Be sure not to overlap timer settings.
- The sleep timer turns off when you perform the record function.

Sound adjustment

Selecting sound effects

Preset EQ

Press [PRESET EQ] repeatedly to select your desired setting.

┌→ HEAVY → SOFT → CLEAR → VOCAL → DISCO ┐
└────── FLAT (off) ← HALL ← LIVE ←──────┘
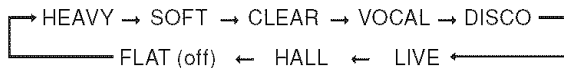
Setting	Effect
HEAVY	Adds punch to rock
SOFT	For background music
CLEAR	Clarifies higher frequencies
VOCAL	Adds gloss to vocal
DISCO	Produces sound with the same kind of lengthy reverberations heard at a disco
LIVE	Makes vocals more alive
HALL	Adds an expansiveness to the sound to produce the atmosphere of a great concert hall
FLAT	No effect

Enhancing the bass sound

You can enhance low-frequency sound so that heavy bass sound can be heard clearly, even if the acoustics of your room are not optimal.

To activate
Press [H.BASS].

To cancel
Press [H.BASS] again.

Note:
The actual effect depends on the disc.

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External unit
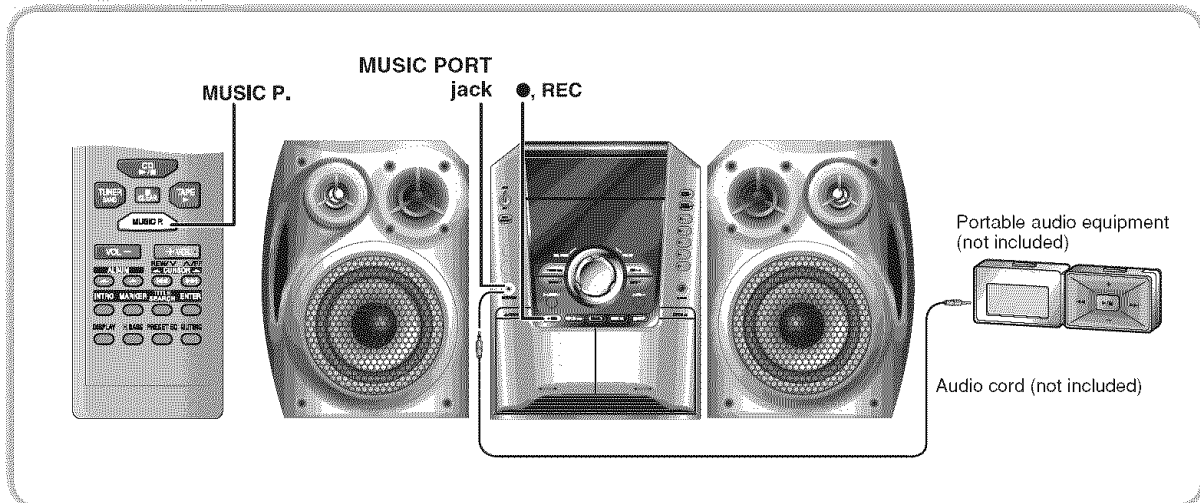
Connecting to a portable audio equipment

This feature enables you to enjoy music from a portable audio equipment.

MUSIC PORT
MUSIC P.   **jack   ●, REC**

Portable audio equipment
(not included)

Audio cord (not included)

Playing from a portable audio equipment

Switch off the equalizer function (if there is any) of the portable audio equipment before you plug into the MUSIC PORT jack. Otherwise, sound from the speaker may be distorted.

1 Plug the audio cord into the MUSIC PORT jack and press [MUSIC P.].

2 Play the portable audio equipment. (See the portable audio equipment's instruction manual.)

Note:
All peripheral components and cables are sold separately.

Recording from a portable audio equipment

1 Press [MUSIC P.].

2 Play the portable audio equipment.

3 Press [●, REC] on the main unit to start recording.

Maintenance

If the surfaces are dirty

To clean this unit, wipe with a soft, dry cloth.
• Never use alcohol, paint thinner or benzine to clean this unit.
• Before using chemically treated cloth, read the instructions that came with the cloth carefully.

For a cleaner crisper sound (cassette deck)

Clean the heads regularly to assure good quality playback and recording. Use a cleaning tape (not included).

When moving the unit

1 Remove all discs.

2 Press [⏻/I] to turn the unit off.

3 Disconnect the AC mains lead.

Troubleshooting guide

Before requesting service, make the checks below. If you can't fix the system as described below, or if something not listed here occurs, refer to the enclosed directory to locate an Authorized Service Center convenient to you or contact your dealer.

Reference pages are shown as black circled numbers ❹.

Common problems

Although the unit is in standby mode, the display lights up and changes continuously.	Turn off the demo function. ❺ If you set the clock, demo function will be turned off automatically. ❶❹
No sound. Sound stops.	Turn the volume up. Switch off the unit, determine and correct the cause, then switch the unit on. Causes include shorting of the positive and negative speaker wires, straining of the speakers through excessive volume or power, and using the unit in a hot environment.
Sound is unfixed, reversed or comes from one speaker only.	Check the speaker connections. ❹
Humming heard during play.	An AC mains lead or fluorescent light is near the cables. Keep other appliances and cords away from this unit's cables.
"ERROR" is displayed.	Incorrect operation performed. Read the instructions and try again.
"– –:– –" appears on the display at standby mode.	You plugged the AC mains lead in for the first time or there was a power failure recently. Set the time. ❶❹
"F61" is displayed.	Check and correct the speaker cords connection. ❹ If this does not fix the problem, there is a power supply problem. Consult the dealer.

Listening to the radio

Noise is heard. The stereo indicator flickers or doesn't light. Sound is distorted.	Use an outdoor antenna. ❺
A beat sound is heard.	Turn the TV off or separate it from the unit.
A low hum is heard during AM broadcast.	Separate the antenna from other cables and cords.

When there is a television set nearby

The picture on the TV disappears or stripes appear on the screen.	The location and orientation of the antenna are incorrect. If you are using an indoor antenna, change to an outdoor antenna. The TV antenna wire is too close to the unit. Separate the antenna wire of the TV set from the unit.

Using the cassette deck

Poor quality sound.	Clean the heads. ❶❻
Recording is not possible.	If the erasure prevention tabs have been removed, cover the holes with adhesive tape. ❶❷

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(Continued on next page)

Playing discs

The display is wrong or play won't start.	The disc may be upside down. ⑩ Wipe the disc. Replace the disc if it is scratched, warped, or non-standard. Condensation may have formed inside the unit due to a sudden change in temperature. Wait for about an hour for it to clear and try again.
The total number of tracks displayed differs each time the same disc is inserted. Unusual sound is heard.	The disc may be scratched, or its data may be defective. Replace the disc.
CD-RW cannot be read.	The disc was incompletely formatted. Use the recording equipment to fully format the disc before recording.
"VBR–" is displayed instead of the remaining play time.	The unit cannot display the remaining play time for variable bit rate (VBR) tracks.

Disc trays

Disc tray(s) cannot open. "CHGR ERR " is displayed.	Press [⏻/I] to release the jammed tray(s) as the unit will switch off. Switch it on again and the tray(s) will initialize to the previous tray(s) condition. If this still does not fix the problem, please consult the dealer.

Remote control

Remote control doesn't work.	Check that the batteries are inserted correctly. ➎ Replace the batteries if they are worn.

Memory reset (Initialization)
When the following situations occur, refer to the instructions below to reset the memory:
• There is no response when buttons are pressed.
• You want to clear and reset the memory contents.

To reset memory
1 **Disconnect the AC mains lead. (Wait at least 3 minutes before proceeding to step 2)**
2 **While pressing and holding down [⏻/I] on the main unit, reconnect the AC mains lead.**
   "– – – – – – – – –" appears on the display.
3 **Release [⏻/I].**
   All the settings are returned to the factory preset.
   You will need to reset the memory items.

Safety precautions

Placement

Set the unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration. These conditions can damage the cabinet and other components, thereby shortening the unit's service life.
Place it at least 15 cm away from wall surfaces to avoid distortion and unwanted acoustical effects.
Do not place heavy items on the unit.

Voltage

Do not use high voltage power sources. This can overload the unit and cause a fire.
Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other place where DC is used.

AC mains lead protection

Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock. Do not pull, bend, or place heavy items on the lead.
Grasp the plug firmly when unplugging the lead. Pulling the AC mains lead can cause electric shock.
Do not handle the plug with wet hands. This can cause electric shock.

Foreign matter

Do not let metal objects fall inside the unit. This can cause electric shock or malfunction.
Do not let liquids get into the unit. This can cause electric shock or malfunction. If this occurs, immediately disconnect the unit from the power supply and contact your dealer.
Do not spray insecticides onto or into the unit. They contain flammable gases which can ignite if sprayed into the unit.

Service

Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service center. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons.
Extend operating life by disconnecting the unit from the power source if it is not to be used for a long time.

AMPLIFIER SECTION **AK340**

RMS Output power
THD 10%, both channels driven
1 kHz
  (Low channel) 105 W per channel (3 Ω)
10 kHz
  (High channel) 105 W per channel (3 Ω)
Total Bi-Amp power   420 W

For South Africa

PMPO   4600 W

AMPLIFIER SECTION AK240

RMS Output power
THD 10%, both channels driven
1 kHz   115 W per channel (3 Ω)
Total output power   230 W

For South Africa

PMPO   2500 W

FM/AM TUNER, TERMINALS SECTION

Preset station   FM 15 stations
    AM 15 stations
Frequency Modulation (FM)
  Frequency range
    87.50 to 108.00 MHz (50 kHz step)
  Sensitivity   4.0 µV (IHF)
  S/N 26 dB   2.2 µV
  Antenna terminal(s) 75 Ω (unbalanced)
Amplitude Modulation (AM)
  Frequency range

For Continental Europe, the United Kingdom, Australia and N.Z.

    522 to 1629 kHz (9 kHz step)

For South Africa

    522 to 1629 kHz (9 kHz step)
    520 to 1630 kHz (10 kHz step)
  Sensitivity
  S/N 20 dB (at 999 kHz)   560 µV/m
Music Port input jack
  Terminal   Stereo, 3.5 mm jack
  Sensitivity   100 mV, 4.7 kΩ
Phone jack
  Terminal   Stereo, 3.5 mm jack

CASSETTE DECK SECTION

Track system   4 track, 2 channel
Heads
  Record/playback Solid permalloy head
  Erasure Double gap ferrite head
Motor   DC servo motor
Recording system   AC bias 100 kHz
Erase system   AC erase 100 kHz
Tape speed   4.8 cm/s
Overall frequency response (+3 dB, −6 dB) at DECK OUT
  NORMAL   35 Hz to 14 kHz
S/N Ratio   50 dB (A weighted)
Wow and flutter   0.18% (WRMS)
Fast forward and rewind time
    Approx. 120 seconds with
    C-60 cassette tape

DISC SECTION

Disc played [8 cm or 12 cm]
  (1) CD-Audio (CD-DA)
  (2) CD-R/RW
    (CD-DA, MP3, WMA formatted disc)
  (3) MP3/WMA
Bit rate
  MP3, WMA   32 kbps to 320 kbps
Sampling frequency
  MP3/WMA   32 kHz, 44.1 kHz, 48 kHz
  CD-DA   44.1 kHz
Decoding   16 bit linear
Digital filter   8 fs
D/A converter   MASH (1 bit DAC)
Pick up
  Wavelength   780 nm
  Beam Source Semiconductor laser
  (For Norge)
  Bølgelengde   780 nm
  Laserstyrke Ingen farlig stråling
    sendes ut
Audio output (Disc)
  Number of channels 2(Stereo) (FL, FR)

SPEAKER SECTION **AK340**

Type
  3 way, 3 speaker system (Bass reflex)
Speaker(s)
  Woofer   16 cm cone type
  Tweeter   6 cm cone type
  Super tweeter   Piezo type
Impedance
  HIGH   3 Ω
  LOW   3 Ω
Input power (IEC)
  HIGH   110 W (Max)
  LOW   110 W (Max)
Output sound pressure level
    83 dB/W (1.0 m)
Cross over frequency 2.6 kHz, 10 kHz
Frequency range 37 Hz to 23 kHz (−16 dB)
    44 Hz to 22 kHz (−10 dB)
Dimensions (WxHxD) 247 x 330 x 221 mm
Mass   3.4 kg

SPEAKER SECTION AK240

Type
  2 way, 2 speaker system (Bass reflex)
Speaker(s)
  Woofer   16 cm cone type
  Tweeter   6 cm cone type
Impedance   3 Ω
Input power (IEC)   115 W (Max)
Output sound pressure level
    83 dB/W (1.0 m)
Cross over frequency   4 kHz
Frequency range 38 Hz to 28 kHz (−16 dB)
    55 Hz to 26 kHz (−10 dB)
Dimensions (WxHxD) 220 x 330 x 208 mm
Mass   2.8 kg

GENERAL

Power supply

For Continental Europe

    AC 230 V, 50 Hz

For the United Kingdom, Australia and N.Z.

    AC 230 to 240 V, 50 Hz

For South Africa

    AC 220 to 240 V, 50/60 Hz

Power consumption

    AK340 : 120 W
    AK240 : 95 W

Dimensions (WxHxD) 250 x 330 x 343 mm
Mass   6.9 kg
Operating temperature range
    +5 to +35 °C
Operating humidity range
    5 to 90 % RH (no condensation)

Power consumption in standby mode	
For Continental Europe, the United Kingdom, Australia and N.Z.	: 0.5 W
For South Africa	: 0.6 W

Note:
1. Specifications are subject to change without notice.
   Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.
3. **AK340** The labels "HIGH" and "LOW" on the rear of the speakers refer to High frequency and Low frequency.

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

The socket outlet shall be installed near the equipment and easily accessible or the mains plug or an appliance coupler shall remain readily operable.

CAUTION!

• DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.
• DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
• DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
• DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY FRIENDLY MANNER.

This product may receive radio interference caused by mobile telephones during use. If such interference is apparent, please increase separation between the product and the mobile telephone.

SUOMI

VAROITUS!

LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

VAROITUS:

TULIPALO-, SÄHKÖISKUVAARAN TAI TUOTETTA KOHTAAVAN MUUN VAHINGON VÄHENTÄMISEKSI EI LAITETTA SAA ALTISTAA SATEELLE, KOSTEUDELLE, VESIPISAROILLE TAI ROISKEELLE, EIKÄ NESTETTÄ SISÄLTÄVIÄ ESINEITÄ, KUTEN ESIMERKIKSI MALJAKOITA, SAA ASETTAA LAITTEEN PÄÄLLE.

Laite tulee asettaa lähelle verkkopistorasiaa ja pistokkeen täytyy olla sellaisessa asennossa, että siihen on helppo tarttua ongelman sattuessa.

VAROITUS!

• ÄLÄ ASENNA TAI LAITA TÄTÄ LAITETTA KABINETTITYYPPISEEN KIRJAKAAPPIIN TAI MUUHUN SULJETTUUN TILAAN, JOTTA TUULETUS ONNISTUISI. VARMISTA, ETTÄ VERHO TAI MIKÄÄN MUU MATERIAALI EI HUONONNA TUULETUSTA, JOTTA VÄLTETTÄISIIN YLIKUUMENEMISESTA JOHTUVA SÄHKÖISKU- TAI TULIPALOVAARA.
• ÄLÄ PEITÄ LAITTEEN TUULETUSAUKKOJA SANOMALEHDELLÄ, PÖYTÄLIINALLA, VERHOLLA TAI MUULLA VASTAAVALLA ESINEELLÄ.
• ÄLÄ ASETA PALAVAA KYNTTILÄÄ TAI MUUTA AVOTULEN LÄHDETTÄ LAITTEEN PÄÄLLE.
• HÄVITÄ PARISTOT LUONTOA VAHINGOITTAMATTOMALLA TAVALLA.

NORSK

ADVARSEL!

DETTE PRODUKTET ANVENDER EN LASER.
BETJENING AV KONTROLLER, JUSTERINGER ELLER ANDRE INNGREP ENN DE SOM ER BESKREVET I DENNE BRUKSANVISNING, KAN FØRE TIL FARLIG BESTRÅLING.
DEKSLER MÅ IKKE ÅPNES, OG FORSØK ALDRI Å REPARERE APPARATET PÅ EGENHÅND. ALT SERVICE OG REPARASJONSARBEID MÅ UTFØRES AV KVALIFISERT PERSONELL.

ADVARSEL:

FOR Å REDUSERE FAREN FOR BRANN, ELEKTRISK STØT ELLER SKADER PÅ PRODUKTET, MÅ DETTE APPARATET IKKE UTSETTES FOR REGN, FUKTIGHET, VANNDRÅPER ELLER VANNSPRUT. DET MÅ HELLER IKKE PLASSERES GJENSTANDER FYLT MED VANN, SLIK SOM BLOMSTERVASER, OPPÅ APPARATET.

Utstyret bør plasseres i nærheten av AC-stikkontakten, og støpslet må være lett tilgjengelig hvis det skulle oppstå problemer.

ADVARSEL!

• APPARATET MÅ IKKE PLASSERES I EN BOKHYLLE, ET INNEBYGGET KABINETT ELLER ET ANNET LUKKET STED HVOR VENTILASJONSFORHOLDENE ER UTILSTREKKELIGE. SØRG FOR AT GARDINER ELLER LIGNENDE IKKE FORVERRER VENTILASJONSFORHOLDENE, SÅ RISIKO FOR ELEKTRISK SJOKK ELLER BRANN FORÅRSAKET AV OVERHETING UNNGÅS.
• APPARATETS VENTILASJONSÅPNINGER MÅ IKKE DEKKES TIL MED AVISER, BORDDUKER, GARDINER OG LIGNENDE.
• PLASSER IKKE ÅPEN ILD, SLIK SOM LEVENDE LYS, OPPÅ APPARATET.
• BRUKTE BATTERIER MÅ KASSERES UTEN FARE FOR MILJØET.