Panasonic®

Operating Instructions

CD Stereo System

Model No. **SC-AK770**

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 system.

System	SC-AK770
Main unit	SA-AK770
Front speakers	SB-AK770
Subwoofer	SB-WAK770

SUPPLIED ACCESSORIES

Please check and identify the supplied accessories.
Use numbers indicated in parentheses when asking for replacement parts. (As of January 2008)

1 x AC mains lead

For the United Kingdom
(K2CT3CA00004)

For Continental Europe
(K2CQ2CA00007)

For Australia and N.Z.
(K2CJ2DA00008)

1 x Remote Control
(N2QAYB000279)

2 x Remote control batteries

1 x FM indoor antenna
(RSA0007-L1)

1 x AM loop antenna
(N1DAAAA00001)

Unless otherwise indicated, illustrations in these operating instructions are for the United Kingdom and Continental Europe.

Operations in these instructions are described mainly using the remote control, but you can perform the operations on the main unit if the controls are the same.

Your unit may not look exactly the same as illustrated.

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.

COMPACT
disc
DIGITAL AUDIO

CLASS 1 LASER PRODUCT

(Back of product)

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.

Pistorasia tulee asentaa laitteen lähelle helppopääsyiseen paikkaan.
Verkkojohdon pistokkeen on oltava aina helposti käytettävissä.
Tämä laite voidaan kytkeä kokonaan irti verkkovirrasta irrottamalla verkkojohdon pistoke pistorasiasta.

TÄMÄ LAITE ON TARKOITETTU KÄYTETTÄVÄKSI LEUDOSSA ILMASTOSSA.

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 PÅ EGENHÅND. ALT SERVICE OG REPARASJONSARBEID MÅ UTFØRES AV KVALIFISERT PERSONELL.

ADVARSEL:

FØLG NEDENSTÅENDE INSTRUKSER FOR Å REDUSERE RISIKOEN FOR BRANN, ELEKTRISK STØT OG SKADE PÅ PRODUKTET:
- DETTE APPARATET MÅ IKKE UTSETTES FOR REGN, FUKTIGHET, DRYPP ELLER SPRUT, OG INGEN VÆSKEFYLTE GJENSTANDER, SOM F.EKS. VASER, MÅ PLASSERES PÅ APPARATET.
- BRUK KUN ANBEFALT TILBEHØR.
- IKKE FJERN DEKSELET (ELLER BAKSIDEN); APPARATET INNEHOLDER INGEN DELER SOM KAN SKIFTES ELLER REPARERES AV BRUKEREN. OVERLAT TIL KVALIFISERTE SERVICETEKNIKERE Å UTFØRE SERVICE.

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.

Strømuttaket må befinne seg i nærheten av utstyret og være lett tilgjengelig.
Støpslet på strømkabelen må være klart til bruk.
Når dette apparatet skal kobles helt fra strømnettet (AC), må støpslet på strømkabelen trekkes ut av stikkontakten.

DETTE APPARATET ER BEREGNET TIL BRUK UNDER MODERATE KLIMAFORHOLD.

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 ⊛ or the BSI mark ♡ 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
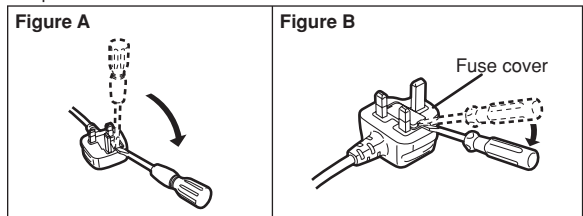
2. Replace the fuse and close or attach the fuse cover.

Figure A	Figure B
Fuse (5 ampere)	Fuse (5 ampere)

RQTV0286
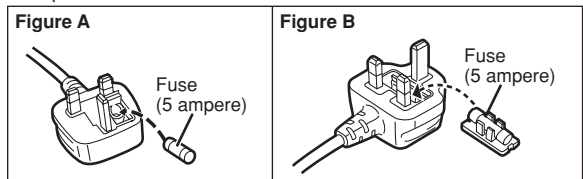
Safety precautions

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 places 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 centre. 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.

Placement of speakers

Front speakers are designed identically so that no left or right channel orientation is necessary.

Place the subwoofer on the floor or a sturdy shelf so that it will not cause vibration.

Front speaker (left)　Main unit　Subwoofer　Front speaker (right)
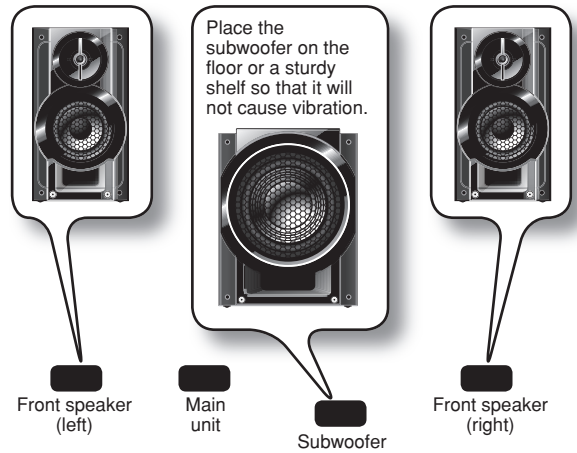
You cannot take the front net off the speakers.

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.**

Simple setup

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

Speaker connections

Speaker	Terminal or connector color
Front (left and right)	White
Subwoofer	Purple

SPEAKERS

(6Ω) (6Ω)
R L
(6Ω)

Connect the left (L) side in the same way.

Subwoofer

(SB-WAK770)

Front speaker (right)

Please refer to "Connecting the Universal Dock for iPod" on page 16 and "Connecting and playing a Bluetooth device" on page 17 for more information on the OPTION port connection.

(R)

(L)

To household mains socket
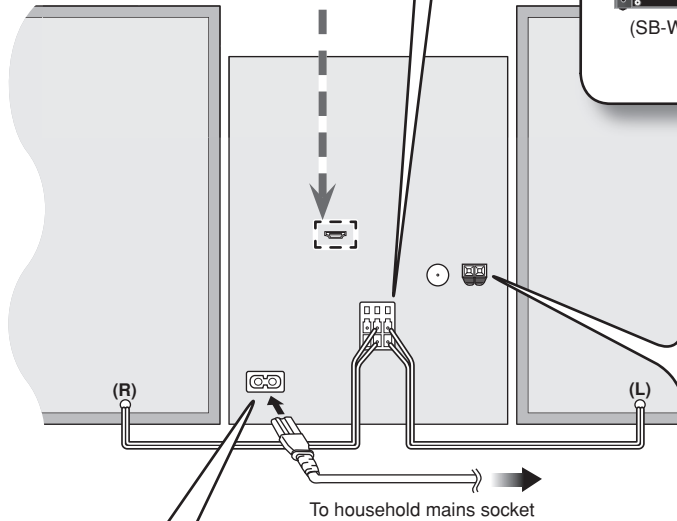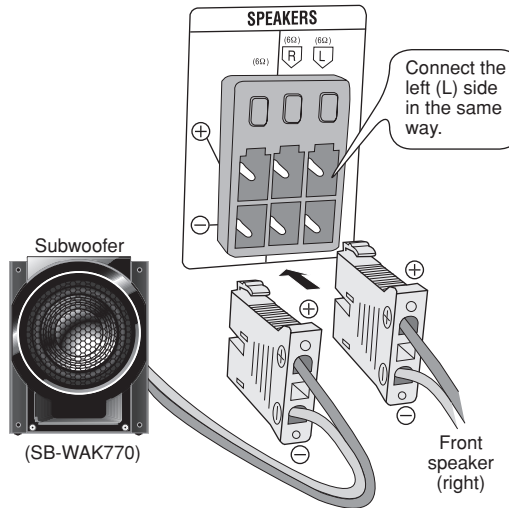
Antenna connections

■ **FM indoor antenna**
Tape the antenna where reception is best.

Adhesive tape

FM ANT (75Ω)
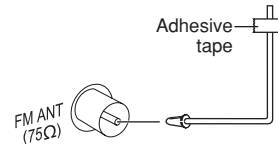
■ **AM loop antenna**

Stand the antenna up on its base.

AM ANT
LOOP EXT

❶

❷
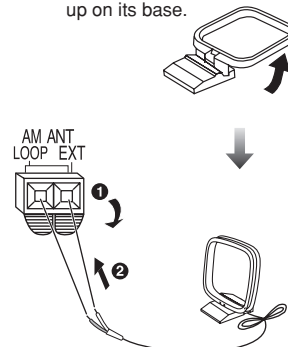
Power supply connection

FOR THE UNITED KINGDOM ONLY
READ THE CAUTION FOR AC MAINS LEAD ON PAGE 3 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
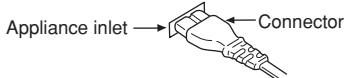
For your reference
To save power when the unit is not to be used for a long time, unplug it from the household mains socket. You will need to reset some memory items after plugging in the unit.

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

Optional antenna connections

Use an outdoor antenna if the 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

FM outdoor antenna
(not included)

Rear panel of
this main unit

75Ω coaxial cable
(not included)

FM ANT
(75Ω)
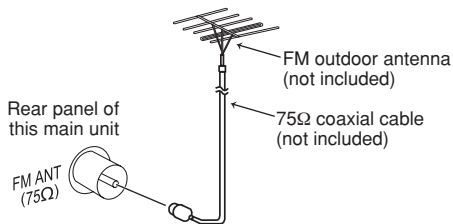
• Disconnect the FM indoor antenna.
• The antenna should be installed by a competent technician.

AM outdoor antenna

AM outdoor antenna
(not included)

5-12 m

Rear panel of
this main unit

AM ANT
LOOP EXT

❶

❷

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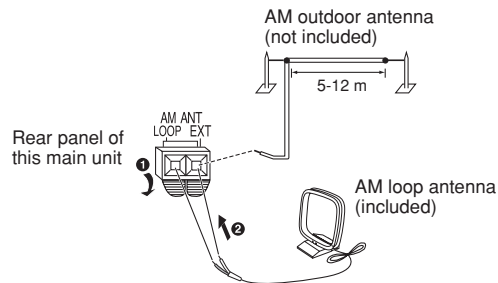
• Run a piece of vinyl wire horizontally across a window or other convenient location.
• Leave the loop antenna connected.

Preparing the remote control

AA/R6/LR6   ❸

❷ Insert so the poles (+ and –) match those in the remote control.

❶
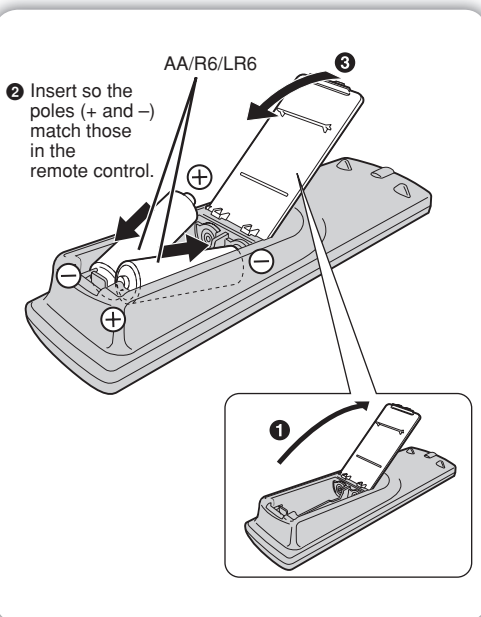
Do not:
• mix old and new batteries.
• use different types of batteries at the same time.
• take apart or short circuit the batteries.
• attempt to recharge alkaline or manganese batteries.
• use batteries if the covering has been peeled off.

Mishandling of batteries in the remote control can cause electrolyte leakage, which may cause a fire.

Remove the batteries if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

■ **Use**
Aim at the remote control signal sensor (➡ page 8), avoiding obstacles, at a maximum range of 7 m directly in front of the unit.

CAUTION
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

• Do not use rechargeable type batteries.
• Do not heat or expose to flame.
• Do not leave the battery(ies) in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.

DEMO function
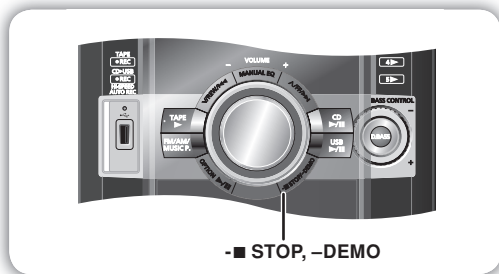
-■ STOP, –DEMO

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 [-■ STOP, –DEMO] on the main unit.
The display changes each time you press and hold the button.
DEMO OFF (off) ↔ DEMO ON (on)

While in standby mode, select "DEMO OFF" to reduce power consumption.

Handling of the disc trays and discs

Not doing the following will cause damage to the unit.

Removing the mains plug

Press [⏻/I] to turn off the unit and remove the mains plug only after all the displays have disappeared.

Inserting a disc   **Tray caution**
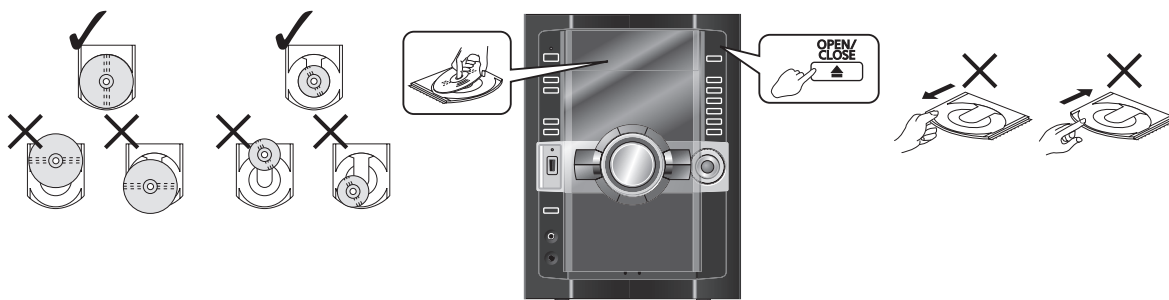
• Place the disc correctly with the label facing up as shown in the diagram.
• Insert one disc into the tray.

• 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.

NOTE on CDs
• This unit can access up to 99 tracks.
• Choose disc with this mark.

• This unit can play MP3 files and CD-DA format audio CD-R/RW that have been finalised.
• 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.

Note about using a DualDisc
The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so playback may not be possible.

NOTE on MP3
• 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.

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.

Limitations on MP3 play
• If you have recorded MP3 on the same disc as CD-DA, only the format recorded in the first session can be played.
• Some MP3s may not be played due to the condition of the disc or recording.
• Recordings will not necessarily be played in the order you recorded them.

RQTV0286

Overview of controls

Main unit

Refer to the numbers in parentheses for page reference. Buttons labelled such as ❶ function in exactly the same way as the controls on the remote control.

Display panel

Disc trays

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

❶ Standby/on switch [⏻/I] (7)
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.

❷

❺

Track skip or search, tape fast-forward or rewind, tape program sensor (TPS), tune or preset channel selection, time adjustment, manual EQ setting (MID and TREBLE) (15)

Tape recording function (12, 16)

CD to USB high-speed auto recording (18)

Recording indicator (18)

•⟜ USB port

Cassette deck open (12)

Music port jack (16)

Headphone jack (⌒)
Avoid listening for prolonged periods of time to prevent hearing damage. Excessive sound pressure from earphones and headphones can cause hearing loss.
Plug type: Ø 3.5 mm stereo (not included)

❽ Tape play (12)

Tuner (FM/AM) selection, Music port selection

Remote control signal sensor

Disc tray open or close (7)

Disc change (10)

Disc direct play

❸

Manual EQ's bass control setting (15)

❻

❾

Stop function (12), Demonstration function (7)

❼ Volume control

Cassette holder (12)

❿

❹

Remote control

Buttons labelled such as ❶ function in exactly the same way as the controls on the main unit.

❶

Sleep timer (14), Auto off

Play timer or record timer setting (14)

Clock or timer setting (14)

❷ Display (11, 13, 16, 19)

Muting function

Dimmer function

Numeric selection (10, 13, 16, 17)

❼

Disc selection (10)

Program function (11, 13)

Tuner (FM/AM) selection (13)

Delete function (11)

Music port selection (16)

Repeat function (11)

❸ Disc play or pause (10, 18)

Play mode function (10, 12, 13, 18, 19)

❹ Option play or pause (16)

❽

❾ USB play or pause (17)

Confirm the selection (11, 16, 19)

Stop function, clear all programed tracks (10, 11, 13, 16, 17)

Track skip or search, tape fast-forward or rewind, tape program sensor (TPS), tune or preset channel selection, time adjustment, manual EQ setting (10 to 17, 19)

Album selection (10, 12, 16, 17)

❿ Manual EQ selection (15)

❺ Subwoofer level selection (15)

RE-MASTER selection (15)

❻ D.BASS selection (15)

SURROUND sound selection (15)

Preset EQ selection (15)

USB edit mode (18, 19)

CD to USB high-speed recording (18)

USB recording mode (19)

USB recording (18)

-SLEEP −AUTO OFF	DIMMER	MUTING
This auto off function allows you to turn off the unit in **disc, tape or USB** mode only after left unused for 10 minutes. • Press and hold [-SLEEP, −AUTO OFF] to activate the function. • Press and hold [-SLEEP, −AUTO OFF] again to cancel. • The setting is maintained even if the unit is turned off.	To dim the display panel. • Press the button to activate. • Press the button again to cancel.	To mute the sound. • Press the button to activate. • Press the button again or adjust the volume to cancel.

RQTV0286

Discs

Basic play

OPEN/CLOSE ▲   CD ▶/Ⅱ

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 CLEAR (■)	Press [■, CLEAR] during play. **MP3** Display when in the stop mode: Example: "MP3" indicates the disc contains MP3 files. Total number Total number of albums of tracks A007T087 1 DISC MP3
Pause play CD ▶/Ⅱ	Press [▶/Ⅱ, CD] during play. Press again to resume play.
Skip album ALBUM ▲ ▼	**MP3** Press [▲/▼, ALBUM] to select the desired album during play or when in stop mode. • This function does not work during 1-DISC RANDOM mode.
Skip tracks ∨/REW ∧/FF [◄◄] [►►]	Press [◄◄, ∨/REW] or [►►, ∧/FF]. • During random play (➡ see right, "Play Mode function"), you cannot skip to tracks which have been played. **MP3** During 1-ALBUM and 1-ALBUM RANDOM mode, track skipping can only be done within the current album.
Search through tracks ∨/REW ∧/FF [◄◄] [►►]	**CD** Press and hold [◄◄, ∨/REW] or [►►, ∧/FF] during play or pause to search. • During program play (➡ page 11), or random play (➡ see right, "Play Mode function"), you can search only within the track.

Play Mode function

PLAY MODE

CD **MP3**
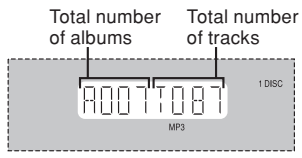
You can listen to specific discs and tracks.

Preparation
Select and play your desired disc. Press [■, CLEAR].

Press [PLAY MODE] to select the desired mode.

Mode	To play
1-DISC 1 DISC	One selected disc.
ALL DISC ALL DISC	All loaded discs in succession from the selected disc to the final disc. Example: 4 → 5 → 1 → 2 → 3.
1-TRACK 1-TR	One selected track on the selected disc. Press the numeric buttons to select the track in the current disc. Play starts from the selected track.
1-ALBUM 1-ALB ALBUM ▲ ▼	**MP3** One selected album on the selected disc. Press [▲/▼, ALBUM] to select the album.
1-DISC RANDOM 1 DISC RND	One selected disc randomly.
1- ALBUM RANDOM 1-ALB RND ALBUM ▲ ▼	**MP3** All tracks in one selected album randomly. Press [▲/▼, ALBUM] to select the album.
ALL DISC RANDOM ALL DISC RND	**CD** All loaded discs randomly.

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".

Changing multiple discs

EXCHANGE ▲

By main unit only

Press [▲, EXCHANGE] 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].

DISPLAY
Checking the track information

(CD) (MP3)

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

(CD)

Elapsed play time ↔ Remaining play time

(MP3)

Elapsed play time → Remaining play time → Album Name → Track Name
↑ ↓
Playing bit rate **(during play only)** ← Tag (Artist) ← Tag (Track) ← Tag (Album)
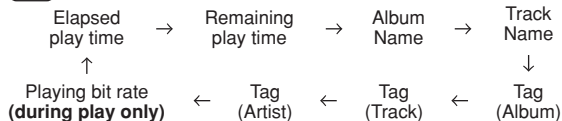
Note:
(MP3)

• "NO TAG" is displayed if titles with tags have not been entered.
• Maximum number of displayable characters: approximately 30
• This unit can display album, track and artist name with MP3 ID3 tags (version 1.0 and 1.1).
• ID3 is a tag embedded in MP3 track to provide information about the track.
• Titles containing text data that the unit does not support cannot be displayed.
• Titles entered with 2-byte code cannot be displayed correctly on this unit.

Advanced play

PROGRAM
Program play

(CD) (MP3)

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)

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

2 **Press [■, CLEAR].**

3 **Press [PROGRAM].**

4 **Press [▲/▼, ALBUM] to select your desired album.**

5 **Press [I◄◄, ∨/REW] or [►►I, ∧/FF] to select the track.**

6 **Press [OK].**
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.
Add to the program	(CD) Repeat steps 3 to 4 in the stop mode. (MP3) 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 PGM 2-06 PGM DISC (MP3) 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.

Note:
• You cannot program CD-DA together with MP3 tracks.

(MP3)
• The program memory is cleared when you change a disc or open the disc tray.
• You cannot program more than one disc.

REPEAT
Repeat play

(CD) (MP3)

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" (➡ see left) and "Play Mode function" (➡ page 10).

Cassette tape – Play and record

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

TAPE ▶	OPEN ▲	**Basic play**

Use normal position tapes.
High position and metal position tapes can be played, but the unit will not be able to identify 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] 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.

3 Press [▶, TAPE] to start play.

To	Action
Stop tape playback	Press [-■ STOP, –DEMO].

| Fast-forward and rewind | Press [∨/REW/I◄◄] or [∧/FF/►►I] in the stop mode. |

Note:
- 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.

TPS (Tape Program Sensor)

This function enables you to search the beginning of up to a maximum of 9 tracks.

Press [∨/REW/I◄◄] or [∧/FF/►►I] during play.
Play resumes from the track found.

Note:
TPS may not operate correctly in the following situations:
- If the interval between tracks is less than 4 seconds.
- If there is noise between tracks.
- If there are silent parts within tracks.

TAPE ●REC	**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.

Note:
- Changes to volume and sound quality do not affect recording.
- This function does not work during any "RANDOM" mode selection.

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

1 Press [▲, OPEN] 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 [▶/ll, CD] and then [-■ STOP, –DEMO].
② Prepare the desired disc recording mode.

To	Action
Record programmed tracks	(CD) Perform steps 2 to 4 in "Program play" (➡ page 11). (MP3) Perform steps 3 to 6 in "Program play" (➡ page 11).

By remote control only	
Record specific discs or 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 10). 3) (MP3) For 1-ALBUM mode and 1-TRACK mode: Press [▲/▼, ALBUM] to select the album. (CD) (MP3) For 1-TRACK mode: Press [I◄◄, ∨/REW] or [►►I, ∧/FF] to select the track.

3 Press [● REC, TAPE] to start recording.

Other basic operations

To	Action
Stop recording	Press [-■ STOP, –DEMO].
Record on the other side of the tape TAPE ●REC	Turn the cassette over and press [● REC, TAPE].
Erase a recorded sound	1) Press [▶, TAPE] and then [-■ STOP, –DEMO]. 2) Insert the recorded cassette. 3) Press [● REC, TAPE].

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

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
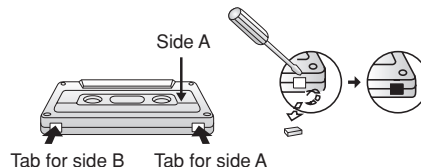
To re-record
Normal cassette

Adhesive tape

Using the FM/AM radio
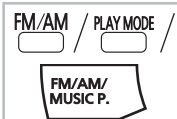
FM/AM / PLAY MODE / FM/AM/MUSIC P.
Manual tuning

1 Press [FM/AM] (main unit: [FM/AM/MUSIC P.]) to select "FM" or "AM".

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

3 Press [|◄◄, ∨/REW] or [►►|, ∧/FF] to select the frequency of the required station.
" ST " is displayed when a stereo FM broadcast is being received.

To tune automatically
Press and hold [|◄◄, ∨/REW] or [►►|, ∧/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 [|◄◄, ∨/REW] or [►►|, ∧/FF] or [■, CLEAR].

PLAY MODE
To improve the sound quality

When "FM" is selected
Press and hold [PLAY MODE] to display "MONO".

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

When "AM" is selected
Press and hold [PLAY MODE].
Each time you press button: BP 1 ↔ BP 2
• The setting is recalled whenever "AM" is selected.

DISPLAY
RDS broadcasting

For the United Kingdom and Continental 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.

Press [DISPLAY] to display:

Station name   Program Type   Frequency
(PS)   →   (PTY)   →   display
                                (FREQ)
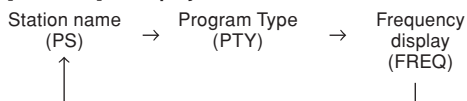
Program type displays			
NEWS	VARIED	FINANCE	COUNTRY
AFFAIRS	POP M	CHILDREN	NATIONAL
INFO	ROCK M	SOCIAL A	OLDIES
SPORT	M-O-R- M ※	RELIGION	FOLK M
EDUCATE	LIGHT M	PHONE IN	DOCUMENT
DRAMA	CLASSICS	TRAVEL	TEST
CULTURE	OTHER M	LEISURE	ALARM
SCIENCE	WEATHER	JAZZ	

※ M-O-R- M = Middle-of-the-Road music

Note:
RDS displays may not be available if reception is poor.

FM/AM / FM/AM/MUSIC P.
Memory preset

30 FM and 15 AM stations can be preset.

Preparation
Press [FM/AM] (main unit: [FM/AM/MUSIC P.]) to select "FM" or "AM".

PROGRAM
Automatic presetting

Press and hold [PROGRAM] to start presetting.

FM 87.50   ·PGM·

PROGRAM
Manual presetting

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

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

3 Press [PROGRAM].

4 Press the numeric buttons to select a channel.
For channels 10 to 30 press [≧10], then the two digits.
The station occupying a channel is erased if another station is preset to that channel.

PLAY MODE
Selecting a preset station

Press the numeric buttons to select the channel.

CH 12

OR

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

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

Using the timers

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 the portable audio equipment (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, disc number (1 to 5), radio or other equipments, and set the volume.
Record timer	Check the cassette's erasure prevention tabs (➡ page 12), insert the cassette 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.

┌── Start time ──┐

ON 8:30 ⏱PLAY   ON 13:00 ⏱REC

Play timer indicator   Record timer indicator
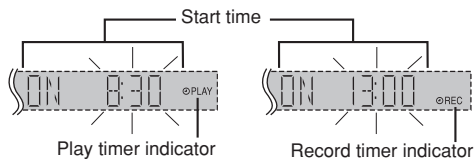
3 Press [CLOCK/TIMER] to confirm.

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

┌── Finish time ──┐

OFF 16:30 ⏱PLAY   OFF 16:00 ⏱REC
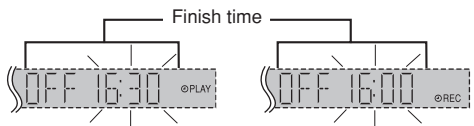
To activate the timer
5 Press [⏱PLAY/REC] repeatedly to turn on your desired timer.

⏱ **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

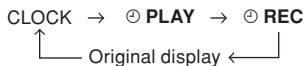| To	Action
Change the settings	Repeat steps 1 to 4 and 6 (➡ see left and above).
Change the source or volume	1) Press [⏱PLAY/REC] to clear the timer indicator from the display. 2) Make changes to the source or volume. 3) Perform steps 5 to 6 (➡ see above).
Check the settings	Press [CLOCK/TIMER] repeatedly to select ⏱PLAY or ⏱REC.
Cancel	Press [⏱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 or 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 every day 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 or OPTION port or USB is selected as the source when the play timer comes on, the system turns on and engages MUSIC PORT or OPTION port or USB as the source. If you wish to record from the portable audio equipment, just activate the portable audio equipment's play mode and increase the volume. (See the other equipments' instruction manual.)

Using the sleep timer

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

Press [-SLEEP, –AUTO OFF] to select your desired time.

30 MIN → 60 MIN → 90 MIN → 120 MIN → OFF

↑————————————————————————————————┘

60MIN SLP
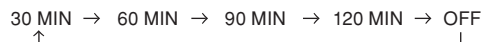
Sleep timer indicator

To cancel
Press [-SLEEP, –AUTO OFF] to select "OFF".

Changing the remaining time
Press [-SLEEP, –AUTO OFF] to show the remaining time and press [-SLEEP, –AUTO OFF] 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.

Using sound effects

PRESET EQ	**Changing the sound quality: Preset EQ**

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

HEAVY → CLEAR → SOFT → VOCAL

EQ-OFF (off) ←

Setting	Effect
HEAVY	Adds punch to rock
CLEAR	Clarifies higher frequencies
SOFT	For background music
VOCAL	Adds gloss to vocal
EQ-OFF	No effect

MANUAL EQ	**Changing the sound quality: Manual EQ**

1 Press [MANUAL EQ] repeatedly to select your desired setting.

BASS → MID → TREBLE

Setting	Effect
BASS	For lower pitch sound
MID	For middle pitch sound
TREBLE	For higher pitch sound

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

OR

By main unit only

1 Press [MANUAL EQ] repeatedly to select your desired setting.

MID ↔ TREBLE

2 Press [∨/REW/I◄◄] or [∧/FF/►►I] to adjust the level.

Setting the BASS;
Turn [BASS CONTROL] to either increase (+) or decrease (–) the pitch.

Note:
- The level of the pitch is between -3 to +3.
- The changes you make are stored and automatically recalled the next time you activate Manual EQ.

RE-MASTER	**Changing the sound quality: RE-MASTER**

This feature reproduces the frequencies lost during recording (original soundtrack) to give you a sound closer to the original.

Press [RE-MASTER] repeatedly to select either "ON RE-MASTER" or "OFF RE-MASTER".

Note:
- During CD (MP3) or USB selection, the re-master effect is digital.
- As for MUSIC PORT or OPTION port selection, the re-master effect is analogue.
- This function will not be available when CD (MP3) is recorded to tape and USB.

SURROUND	**Changing the sound quality: SURROUND sound**

Enables you to add natural width and depth to the stereo sound.

To activate
Press [SURROUND] to display " ▌▐▐▌▌█▐▌▌▐ " indicator.

To cancel
Press [SURROUND] again to clear " ▌▐▐▌▌█▐▌▌▐ " indicator.

Note:
- Surround sound is less discernible when listening through headphones.
- If interference in FM stereo reception increases, cancel the surround sound effect.

D.BASS	**Enjoying the bass: D.BASS**

Press [D.BASS] repeatedly to select either "ON D.BASS" or "OFF D.BASS".

Note:
"D.BASS" knob remains lighted during "ON D.BASS" or "OFF D.BASS" selection.

SUBWOOFER	**Boosting the subwoofer**

Press [SUBWOOFER] repeatedly to select your desired setting.

MID (medium) → MAX (high) → OFF (off)

Note:
This function is not applicable when a headphone is connected.

Using other equipment

Note:
All peripheral components and cables are sold separately.

Avoid interfering with other Panasonic equipment

FM/AM/MUSIC P.

Other Panasonic audio or video equipment may start functioning when you operate the unit using the supplied remote control.

You can operate this unit in another mode by setting the remote control operating mode to "REMOTE 2".

The main unit and remote control must be set to the same mode.

1 Press [MUSIC P.] (main unit: [FM/AM/MUSIC P.]) to select "MUSIC PORT".

2 Press and hold [FM/AM/MUSIC P.] on the main unit. Then press [2] on the remote control until "REMOTE 2" is displayed.

3 Press and hold [OK] on the remote control followed by numeric button [2].

To change the mode back to "REMOTE 1", repeat the steps above by replacing [2] with [1].

Connecting to a portable audio equipment

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

Portable audio equipment (not included)

Audio cord (not included)
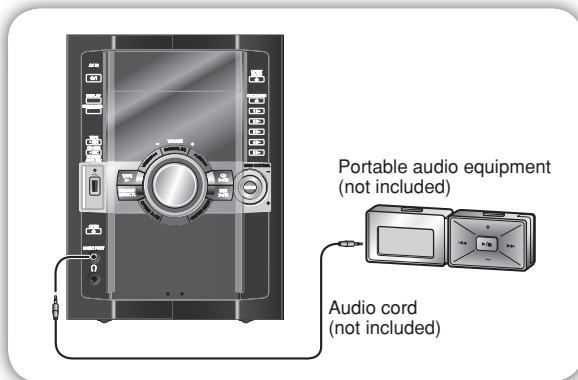
Playing or recording from a portable audio equipment

MUSIC P.

Switch off the equaliser 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.

2 Press [MUSIC P.] (main unit: [FM/AM/MUSIC P.]) to select "MUSIC PORT".
For listening : Proceed to step 3.
For recording : Press [● REC, TAPE] on the main unit to start recording.

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

Connecting the Universal Dock for iPod

You can charge and play your iPod by connecting a Universal Dock for iPod (SH-PD10, sold separately) to this unit.

Connecting and charging the iPod

1 Connect the Universal Dock for iPod into the OPTION port.

iPod (not included)

OPTION port
Ver. 1
DC OUT ⎓ 5V 500mA max

Rear panel of this main unit

SH-PD10 (not included)
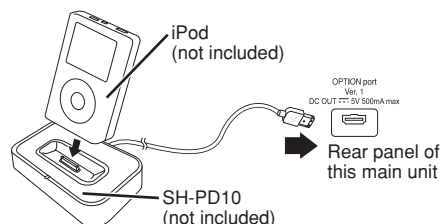
2 Insert the appropriate adapter and place your iPod into the Universal Dock. (See the SH-PD10's instruction manual.)

Note:
• Hold the dock when disconnecting the iPod.
• iPod will be recharged regardless of whether this unit is on or off.

Playing the iPod

1 Connect the iPod as described above.

2 Press [▶/Ⅱ, OPTION] to start play.

To	Action
Pause OPTION ▶/Ⅱ / CLEAR ■	Press [▶/Ⅱ, OPTION] or [■, CLEAR]. Press [▶/Ⅱ, OPTION] to resume play.
Skip tracks ∨/REW ∣◀◀ / ∧/FF ▶▶∣	Press [∣◀◀, ∨/REW] or [▶▶∣, ∧/FF].
Search through tracks ∨/REW ∣◀◀ / ∧/FF ▶▶∣	Press and hold [∣◀◀, ∨/REW] or [▶▶∣, ∧/FF].
Display iPod menu screen DISPLAY	Press [DISPLAY].
Use as iPod menu cursor ALBUM ▲ ▼	Press [▲/▼, ALBUM].
Confirm iPod menu selection OK	Press [OK].

Note:
Refer to the SH-PD10's instruction manual for the compatible iPod models.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

Connecting and playing a Bluetooth device

By connecting a Bluetooth Receiver (example: SH-FX570R, sold separately), you can receive and play the audio stored in your Bluetooth audio source device (personal computer, etc).

OPTION port
Ver. 1
DC OUT ⎓ 5V 500mA max

Rear panel of
this main unit

SH-FX570R
(not included)

1 Connect the Bluetooth Receiver into the OPTION port and press [▶/Ⅱ, OPTION] to select "OPTION".

2 Pairing and play your Bluetooth audio device. (See the SH-FX570R's instruction manual.)

3 Press [▶/Ⅱ, OPTION] to start play.

To	Action
Pause OPTION ▶/Ⅱ	Press [▶/Ⅱ, OPTION]. Press [▶/Ⅱ, OPTION] to resume play.
Skip tracks ∨/REW ∧/FF Ⅰ◀◀ ▶▶Ⅰ	Press [Ⅰ◀◀, ∨/REW] or [▶▶Ⅰ, ∧/FF].

Connecting and playing a USB mass storage device

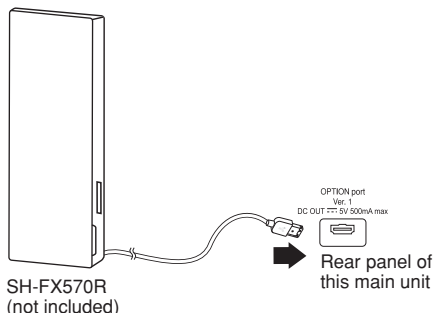The USB connectivity enables you to connect and play MP3 tracks from USB mass storage class. Typically, USB memory devices. (Bulk only transfer)

Preparation
Before connecting any USB mass storage device to the unit, ensure that the data stored therein has been backed up.

USB enabled device
(not included)
It is not recommended to use a USB extension cable. The device connected via the cable will not be recognised by this unit.
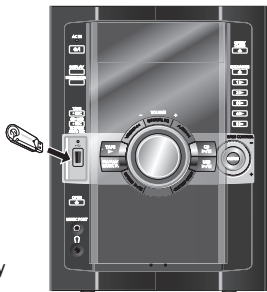
1 Reduce the volume and connect the USB mass storage device.

2 Press [▶/Ⅱ, USB] to start play.

To	Action
Pause play USB ▶/Ⅱ	Press [▶/Ⅱ, USB]. Press again to resume play.
Stop play CLEAR ■	Press [■, CLEAR]. The current track will be memorised. Press [▶/Ⅱ, USB] to resume play. OR Press [■, CLEAR] again to clear the memory.
Skip tracks ∨/REW ∧/FF Ⅰ◀◀ ▶▶Ⅰ	Press [Ⅰ◀◀, ∨/REW] or [▶▶Ⅰ, ∧/FF]. OR Press the numeric buttons.
Skip album ALBUM ▲ ▼	Press [▲/▼, ALBUM].

Compatible devices

Devices which are defined as USB mass storage class:
– USB devices that support bulk only transfer.
– USB devices that support USB 2.0 full speed.

Supported format

Files must have the extension ".mp3" or ".MP3".

Note:
• Folders are defined as album.
• Files are defined as track.
• Track must have the extension ".mp3" or ".MP3".
• CBI (Control/Bulk/Interrupt) is not supported.
• A device using NTFS file system is not supported.
  [Only FAT 12/16/32 (File Allocation Table 12/16/32) file system is supported]
• Depending on the sector size, some files may not work.
• Maximum album: 255 albums
• Maximum track: 2500 tracks
• Maximum track in one album: 999 tracks
• Only one memory card will be selected when connecting a multiport USB card reader. Typically the first memory card inserted.
• Disconnect the USB card reader from the unit when you remove the memory card. Failure to do so may cause malfunction to the device.
• When you connect a compatible digital audio player to the USB port, charging may be activated. It will not charge when the unit is in standby mode (during "DEMO OFF").

Recording to a USB mass storage device

You can record sound or music tracks from the disc to a USB mass storage device.

Note:
- This function does not work during any "RANDOM" mode selection.
- A new album is created each time you perform a recording. Depending on the USB's memory, the album's sequence may change once the recording has completed.
- The recorded sound or music tracks are stored in a folder named "REC_DATA".
- All tracks are recorded to .mp3 format.

Recording from a disc

Recording is prohibited for disc encoded with copyright protection.

USB REC
[●] **Normal recording**

[CD] [MP3]

1 Connect the USB device.

2 Insert the disc you want to record.

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

4 Prepare the desired recording mode.

To	Action
Record programmed tracks	Program the tracks you want (➡ page 11).
Record specific tracks	Press [PLAY MODE] to select the desired mode (➡ page 10).

5 Press [●, USB REC] to start recording.
"REC" is displayed and recording indicator blinks.

Front panel of this main unit — Recording indicator

"ALBUMXXX MAKING" is displayed. "ALBUMXXX" is the album's name.

To	Action
Stop recording CLEAR [■]	Press [■, CLEAR]. "WRITING" is displayed for a few second.
Erase a recorded track	(➡ page 19)

HI-SPEED USB REC / CD▶USB [●REC] HI-SPEED AUTO REC **High-speed recording**

[CD]

Recording speed:
CD to USB device : Four times (maximum of 4x) the normal speed.
CD-RW to USB device : Two times (2x) the normal speed.

1 Connect the USB device.

2 Insert the CD you want to record.

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

4 By remote control only
Press [PLAY MODE] to select 1-DISC or ALL DISC.
Press [HI-SPEED] and [●, USB REC] simultaneously to start recording.

By main unit only
Press [● REC, CD ▶ USB HI-SPEED AUTO REC] to start recording.
ALL DISC will be automatically selected during recording.

■ **Limitations of high-speed recording**
This unit uses a copy management system to limit the use of high-speed recording.

- **You are unable to perform a second high-speed recording from the same CD within 74 minutes upon the completion of the first high-speed recording.**
(You are able to perform the second recording at the normal speed.)
"PLEASE WAIT XX MIN" will be displayed if you try to perform a second high-speed recording.
"XX MIN" – the number of minutes you need to wait prior to performing the second recording.
- **You are unable to perform high-speed recording if the USB's remaining REC (recording) time is shorter than the CD album's total playback time.**
"CAN'T REC" will be displayed.
- **You can record up to 24 discs within 74 minutes.**
If you completed recording 24 discs within approximately 74 minutes, you will not be able to record the twenty-fifth disc.

Note:
- Depending on the condition of the disc, it may not be possible to record at four times the normal speed or perform high-speed recording. Record the CD at normal speed.
- The sound is muted during high-speed recording.

EDIT MODE
[ ] **Recording from CD using analogue format**

[CD]

You can change your recording mode from the default digital recording to analogue recording.

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

2 Press and hold [EDIT MODE] to select "ANALOG-REC".
Each time you press and hold the button:

ANALOG-REC   DIGITAL-REC
(analogue recording) ↔ (digital recording)

Note:
- The recording mode returns to the default "DIGITAL-REC" after completing the analogue recording.
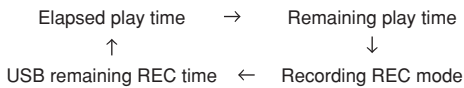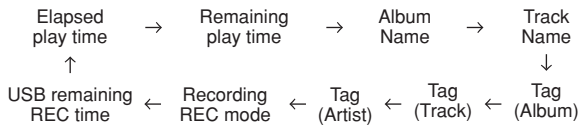- High-speed recording is not applicable while using analogue mode.

DISPLAY
Display function

This function allows you to display the information during recording.
Press [DISPLAY] repeatedly during USB recording mode.

(CD)

Elapsed play time → Remaining play time
↑ ↓
USB remaining REC time ← Recording REC mode

(MP3)

Elapsed play time	→	Remaining play time	→	Album Name	→	Track Name
↑						↓
USB remaining REC time ←	Recording REC mode ←	Tag (Artist) ←	Tag (Track) ←	Tag (Album)		

Other recording functions

REC MODE
Recording mode

You can select the desired recording mode before you start recording.

Press [REC MODE] repeatedly to select your desired setting.

128 KBPS → 192 KBPS → 320 KBPS

Recording mode	Effect
128 KBPS	Long play mode
192 KBPS	Normal mode
320 KBPS	High quality sound mode

During recording
Press [DISPLAY] repeatedly to display the current recording mode.

Note:
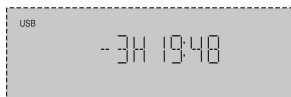You cannot change the recording mode during recording.

DISPLAY
Display function

You are able to check the USB device's remaining recording time before or during recording.
Press [DISPLAY].

```
USB
    -3H 19:48
```

Note:
During recording, the remaining time displayed is an estimation of the current recording mode.

EDIT MODE
Erasing the recorded tracks

This function allows you to erase unwanted tracks quickly and easily.

1 **Press [▶/ll, USB] and then [■, CLEAR].**

2 **Press [PLAY MODE] to select ALL.**
Select your desired album or tracks.

3 **Press [EDIT MODE] to select your desired erasing mode.**
Each time you press the button:

TRACKDEL → ALBUMDEL → FORMAT
↑_____ Original display ←_____|
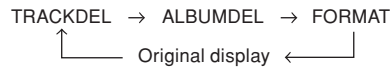
Edit Mode	Action
TRACKDEL	Erase single track
ALBUMDEL	Erase one album
FORMAT	Erase all albums (format USB device)

4 **Press [OK].**
Within 2 seconds or so, the selected item to be erased is displayed followed by the "PRESS OK" display.
Example:

Track number
```
USB
    DEL T001
MP3
```
➡
```
USB
    PRESS OK
MP3
```
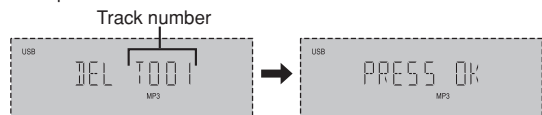
5 **Press [OK] again.**

6 **Press [l◀◀, ∨/REW] or [▶▶l, ∧/FF] to select "YES" then press [OK] to confirm the erasure.**
"WRITING" is displayed.

OR

Press [l◀◀, ∨/REW] or [▶▶l, ∧/FF] to select "NO" then press [OK] to cancel the erasure.
Example:

```
USB
    SURE?YES
MP3
```
➡
```
USB
    -WRITING-
MP3
```
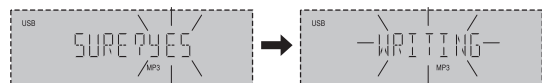
Note:
For "ALBUM DEL", only 999 tracks in albums which contain more than 1000 tracks will be erased. To erase the selected album, repeat steps 2 to 6.

Troubleshooting guide

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the solutions indicated in the chart do not solve the problem, consult your dealer for instructions.

■ Common problems | | Page

When the unit is in standby mode, the display lights up and changes continuously.	• Turn off the demo function. • If you set the clock, demo function will be turned off automatically.	7 14
No response from the unit even though it has been turned on.	• Press [⏻/l] for more than 10 seconds to turn off the unit. Alternatively, unplug the AC mains lead and plug it in after a lapse of a few seconds. Turn the unit on again.	—
No response when remote control buttons are pressed.	• Check that the batteries are installed correctly.	6
Distorted sound or no sound.	• Turn the volume up. • Turn off the unit, determine and correct the cause, then turn the unit on again. It may be caused by straining of the speakers through excessive volume or power, and using the unit in a hot environment.	— —
A "humming" sound can be heard during play.	• An AC mains lead or fluorescent light is near the unit. Keep other appliances and cords away from the unit.	—
"NO PLAY"	• Check the content. • Only MP3 format files can be played.	— —
"ERROR" is displayed. "ERROR" is displayed during recording.	• Incorrect operation performed. Read the instructions and try again. • You are not able to select other playback source (example: radio, USB and etc.) or press [⏮, ∨/REW] or [⏭, ∧/FF] during recording. Stop the recording function.	— 12
"– –:– –" appears on the display during standby mode.	• You plugged the AC mains lead in for the first time or there was a power failure recently. • Set the time.	— 14
"F61" is displayed.	• Check and correct the speaker cords connection. If this does not fix the problem, consult the dealer.	5
"F76" is displayed.	• There is a power supply problem. Consult the dealer.	—

■ Playing the discs

Incorrect display or play will not start.	• You have not inserted the disc correctly; insert it correctly. • Disc may be dirty. Wipe it clean. • Replace the disc if it is scratched, warped, or non-standard. • Condensation has formed: Wait 1 to 2 hours for it to evaporate.	7 — — —
The total number of tracks displayed is incorrect. The disc cannot be read. Distorted sound is heard.	• You have inserted a disc the unit cannot play; insert one it can. • You have inserted a disc that has not been finalized or completely formatted.	— —
"VBR–" is displayed instead of the remaining play time.	• The unit cannot display the remaining play time for variable bit rate (VBR) tracks.	—

■ Using the cassette deck

Poor sound quality.	• Clean the heads.	23
Recording cannot be performed.	• If the erasure prevention tabs have been removed, cover the holes with adhesive tape.	12

■ Listening to the radio

Distorted sound or noise is heard. The stereo indicator flickers or does not light.	• Use an outdoor antenna.	6
A beat sound is heard.	• Turn the television off or move it away from the unit. • Switch to either BP 1 or BP 2 when in AM tuner mode.	— 13
A low hum is heard during AM broadcast.	• Separate the antenna from other cables and cords.	—

■ Using the USB device

Page

No response when [● REC, TAPE] button is pressed.	• Disconnect the USB device and then reconnect it back. Alternatively, turn the unit off and then back on.	—
USB recording stops suddenly. "REC ERROR"	• Select a suitable recording mode (128 KBPS or 192 KBPS) and resume recording.	19
The USB drive or its contents cannot be read.	• The USB drive format or its contents is/are not compatible with the system, "NO PLAY" is displayed. Unplug the USB device and insert it again. Alternatively, format the USB device and record the desired tracks again and playback the device. • The USB host function of this product may not work with some USB devices. • USB devices with storage capacity of more than 8 gigabytes may not work in some instances.	17 19 — —
Slow operation of the USB device.	• Large file size or high memory USB flash drive takes longer time to read.	—
"USB OVER CURRENT ERROR"	• The USB device is drawing too much power. Disconnect the USB device. Turn the unit off and then back on.	—
"HI-SPEED CAN'T REC"	• You cannot use high-speed recording while using analogue mode. Change to digital mode or use normal recording.	—
"PLEASE WAIT XX MIN"	• You cannot perform a second high-speed recording. You have to wait until the displayed "XX" minutes have lapsed prior to performing the next high-speed recording.	18
"DEVICE FULL"	• You cannot perform high-speed recording because the total USB remaining REC (recording) time of the USB device is less than the total time of the music source. Change to a USB device which has the appropriate recording time and perform the high-speed recording again.	18

■ 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. Turn it on again and the tray(s) will initialise to the previous tray(s) condition. • If this still does not fix the problem, please consult the dealer.	— —

Specifications

AMPLIFIER SECTION

RMS output power

Front Ch (both channels driven)

	250 W per channel (6 Ω), 1 kHz, 10% THD
Subwoofer Ch	200 W per channel (6 Ω), 100 Hz, 10% THD
Total RMS stereo mode power	700 W

FM/AM TUNER, TERMINALS SECTION

Preset station	FM 30 stations
	AM 15 stations
Frequency Modulation (FM)	
Frequency range	87.50 to 108.00 MHz (50 kHz step)
Antenna terminal(s)	75 Ω (unbalanced)
Amplitude Modulation (AM)	
Frequency range	522 to 1629 kHz (9 kHz step)
Music Port (front) jack	
Sensitivity	100 mV, 4.0 kΩ
Terminal	Stereo, 3.5 mm jack
Headphone jack	
Terminal	Stereo, 3.5 mm jack
Output level (CD, 1 kHz, –20 dB)	32 Ω (Max)

CASSETTE DECK SECTION

Type	1 way
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 10 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※ formatted disc)
(3) MP3※
※MPEG-1 Layer 3, MPEG-2 Layer 3

Pick up	
Wavelength	780 nm
Beam Source	Semiconductor laser
NORSK	
Bølgelengde	780 nm
Laserstyrke	Ingen farlig stråling sendes ut
Audio output (Disc)	
Number of channels	2.1 (FL, FR, SW)

FL = Front left channel
FR = Front right channel
SW = Subwoofer channel

USB SECTION

USB Port	
USB Standard	USB 2.0 full speed
Media file format support	
MP3 (※.mp3)	
USB device file system	
FAT 12	
FAT 16	
FAT 32	
USB port power	500 mA (Max)
USB Ripping (recording)	
Recording file format	
MP3 (※.mp3)	
Bit rate	128 kbps / 192 kbps / 320 kbps
USB recording speed	1x, max 4x (CD only)

SPEAKER SECTION

Front speakers SB-AK770

Type	2 way, 2 speaker system (Bass reflex)
Speaker(s)	
Tweeter	6 cm cone type
Woofer	16 cm cone type
Impedance	6 Ω
Input power (IEC)	250 W (Max)
Output sound pressure	83 dB/W (1.0 m)
Frequency range	49 Hz to 28 kHz (–16 dB)
	52 Hz to 26 kHz (–10 dB)
Dimensions (WxHxD)	221 x 401 x 244 mm
Mass	3.53 kg

Subwoofer SB-WAK770

Type	1 way, 1 speaker system (Bass reflex)
Speaker(s)	
Woofer	25 cm cone type
Impedance	6 Ω
Input power (IEC)	250 W (Max)
Output sound pressure level	82 dB/W (1.0 m)
Frequency range	48 Hz to 250 Hz (–16 dB)
	50 Hz to 200 Hz (–10 dB)
Dimensions (WxHxD)	320 x 415 x 330 mm
Mass	7.15 kg

GENERAL

Power supply	AC 230 to 240 V, 50 Hz
Power consumption	145 W
Dimensions (WxHxD)	250 x 331 x 334 mm
Mass	4.9 kg
Operating temperature range	0°C to +40°C
Operating humidity range	35% to 80% RH (no condensation)

Power consumption in standby mode:	0.4 W (approx.)

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.

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.**

Ⓔ

RQTV0286-2B
L0408KE2058