



Panasonic[®]

Operating Instructions CD Stereo System

Model No. **SC-AKX54**

Thank you for purchasing this product.

For optimum performance and safety, please read these instructions carefully.

Please keep this manual for future reference.

Panasonic Corporation
Web Site: <http://panasonic.net>



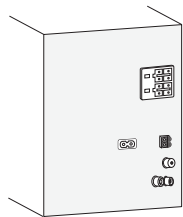
RQT9630-B
L0112CH0

Do the procedures with the remote control. You can also use the buttons on the main unit if they are the same.

Your system and the illustrations can look differently.

These operating instructions are applicable to the following system.

System	SC-AKX54
Main unit	SA-AKX54
Speakers	SB-AKX54



Back of product



CAUTION	• LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.	FDA 21 CFR / Class
CAUTION	• CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1 +A2: Class 1M	
WARNING	• KLASSE 1M SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN DIREKT GENOM OPTISKE INSTRUMENT.	
FORSIKTIG	• SYNLIG OG OSYNLIG LASERSTRÅLING KLASSE 1M. NÄR LAGET ER ÅBENT, UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.	
VARO!	• AVATTRESSA OLET ALTINNA LUOKAN 1M NÄKYYVÄÄ JA NÄKYMÄTÖITÄ LASERSÄTELYÄ. ÄLÄ KATSO OPTISELLÄ LAITTEELLA SUORAAN SÄTEESEEN.	
VORSICHT	• SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG KLASSE 1M. WENN ABDECKUNG GEÖFFNET, NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.	
ATTENTION	• RAYONNEMENT LASER VISIBLE ET INVISIBLE. CLASSE 1M. EN CAS D'OUVERTURE, NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D'OPTIQUE.	
PRECAUCIÓN	• RADIACIÓN LASER VISIBLE E INVISIBLE DE CLASE 1M AL ESTAR ABIERTO. NO VEA DIRECTAMENTE CON INSTRUMENTOS ÓPTICOS.	

RQLXS0106

Inside of product

Safety precautions

WARNING!

Unit

- To reduce the risk of fire, electric shock or product damage,
 - Do not expose this unit to rain, moisture, dripping or splashing.
 - Do not place objects filled with liquids, such as vases, on this unit.
 - Use only the recommended accessories.
 - Do not remove covers.
 - Do not repair this unit by yourself. Refer servicing to qualified service personnel.
 - Do not let metal objects fall inside this unit.
 - Do not handle the plug with wet hands.

CAUTION!

Unit

- To reduce the risk of fire, electric shock or product damage,
 - Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure this unit is well ventilated.
 - Do not obstruct this unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
 - Do not place sources of naked flames, such as lighted candles, on this unit.
 - Set this unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration.
 - Do not use a DC power source.
- This unit is intended for use in moderate climates.
- Install this unit so that the AC mains lead can be unplugged from the socket outlet immediately if any problem occurs.
- This unit may receive radio interference caused by mobile telephones during use. If such interference occurs, please increase separation between this unit and the mobile telephone.
- This unit utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Battery

- Do not break open or short-circuit the battery.
- Do not charge the alkaline or manganese battery.
- Do not use the battery if the cover has peeled off.
- Do not heat or expose to flame.
- Do not leave the battery(ies) in a car exposed to direct sunlight for a long period of time with door and windows closed.
- Remove the battery if you do not use the remote control for a long period of time. Keep in a cool, dark area.
- Danger of explosion if battery is incorrectly replaced. Replace only with the type recommended by the manufacturer.
- When disposing the batteries, please contact your local authorities or dealer and ask for the correct method of disposal.

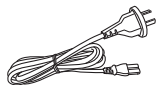
- If you see this symbol -

	<p>Information on Disposal in other Countries outside the European Union</p> <p>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.</p>
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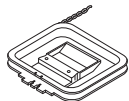
Supplied accessories

Check and identify the supplied accessories.

1 x AC mains lead



1 x AM loop antenna



1 x FM indoor antenna



1 x Remote control battery



1 x Remote control (N2QAYB000637)



Placement of speakers



The right and left speakers are the same.
You cannot remove the net of the speakers.

Use only the supplied speakers.

The combination of the main unit and speakers give the best sound.

You can cause damage to the system and decrease the sound quality if you use other speakers.

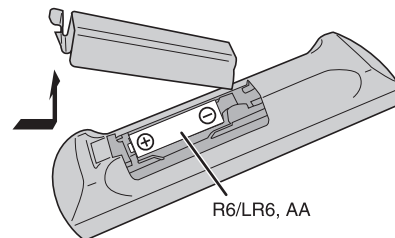
Note:

- Keep your speakers more than 10 mm from the main unit for ventilation.
- Put the speakers on a flat safe surface.
- These speakers do not have magnetic shielding. Do not put them near TVs, PCs or other equipment easily influenced by magnetism.
- When you play at high levels for a long period, it can cause damage to the system and decrease the life of the system.
- Decrease the volume in these conditions to prevent damage:
 - When you play distorted sound.
 - When you adjust the sound quality.

CAUTION!

- Use the speakers only with the recommended system. If not, you can cause damage to the amplifier and speakers and can cause a fire. Consult an approved service personnel if damage occurs or if there is a sudden apparent change in performance.
- Do the procedures included in these instructions when you attach the speakers.

Preparing the remote control



Use alkaline or manganese battery.

Install the battery so that the poles (+ and –) align with those in the remote control.

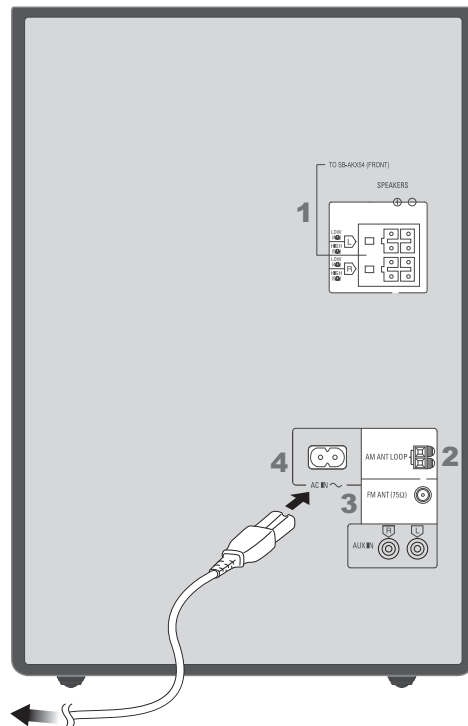
Point the remote control at the remote control sensor, away from obstacles, at a maximum range of 7 m directly in front of the main unit.

Making the connections

Conserving power

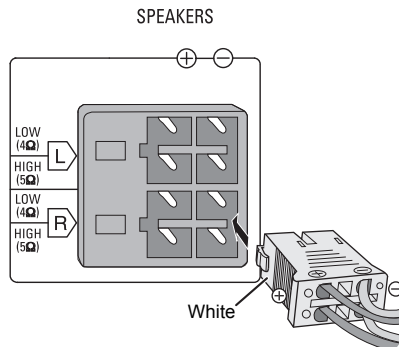
The system consumes approximately 0.3 W when it is in standby mode. Disconnect the power supply if you do not use the system.

Some settings will be lost after you disconnect the system. You have to set them again.



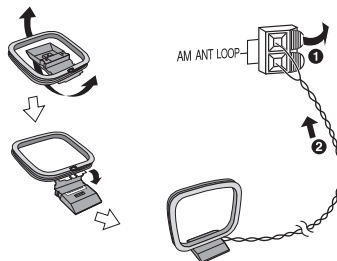
To household mains socket

1 Connect the speakers.



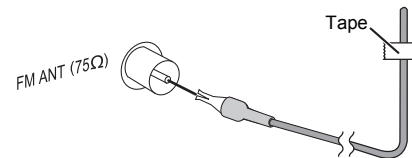
2 Connect the AM loop antenna.

Stand the antenna up on its base until it clicks.



3 Connect the FM indoor antenna.

Place the antenna where reception is best.



4 Connect the AC mains lead.

Use the supplied AC mains lead with this system only. Do not use an AC mains lead from other equipment.

Troubleshooting

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

Common problems

The display panel lights up and changes continuously in standby mode.

- Press and hold [■] on the main unit to select "DEMO OFF".

No operations can be done with the remote control.

- Examine that the battery is installed correctly.

Sound is distorted or no sound.

- Adjust the volume of the system.
- Switch off the system, determine and correct the cause, then switch the system on again. It can be caused by straining of the speakers through excessive volume or power, and when using the system in a hot environment.

A "humming" sound can be heard during playback.

- An AC mains lead or fluorescent light is near the cables. Keep other appliances and cords away from the cables of this system.

The sound level reduces.

- The protection circuit has been activated due to the continuous use at high volume output. This is to protect the system and maintain the sound quality.

Disc

Display not shown correctly.

Playback does not start.

- You have not put in the disc correctly. Put it in correctly.
- Disc is dirty. Clean the disc.
- Replace the disc if it is scratched, warped, or non-standard.
- There is condensation. Let the system dry for 1 to 2 hours.

The total number of tracks displayed is incorrect.

The disc cannot be read.

Distorted sound is heard.

- You put in a disc that the system cannot play. Change to a playable disc.
- You put in a disc that has not been finalised.

Radio

Sound is distorted.

- Use an optional FM outdoor antenna. The antenna should be installed by a competent technician.

A beat sound is heard.

- Switch off the TV or move it away from the system.
- Set to "BP 1" or "BP 2" when in AM tuner mode.

A low hum is heard during AM broadcasts.

- Move the antenna away from other cables and cords.

USB

The USB device or the contents in it cannot be read.

- The format of the USB device or the contents in it is/are not compatible with the system.
- USB devices with storage capacity of more than 32 GB cannot work in some conditions.

Slow operation of the USB device.

- Large content size or large memory USB device takes longer time to read.

Main unit displays

"NO PLAY"

"UNSUPPORT"

- Examine the content. You can only play supported format.
- The files in the USB device can be corrupted. Format the USB device and try again.

"F61"

- Examine and correct the speaker cords connection.
- Disconnect the USB device. Switch off the system and then switch it on again.

"ERROR"

- An incorrect operation was done. Read the instructions and try again.

"ERROR" (during recording)

- You cannot select other playback source (example: radio, USB etc.) or press [◀◀] or [▶▶] during recording. Stop the recording function.
- You cannot open disc tray when recording from AM source.

"PLAYERERROR"

- You played an unsupported MP3 files. The system will skip that track and play the next one.

"VBR--"

- The system cannot show the remaining play time for variable bit rate (VBR) tracks.

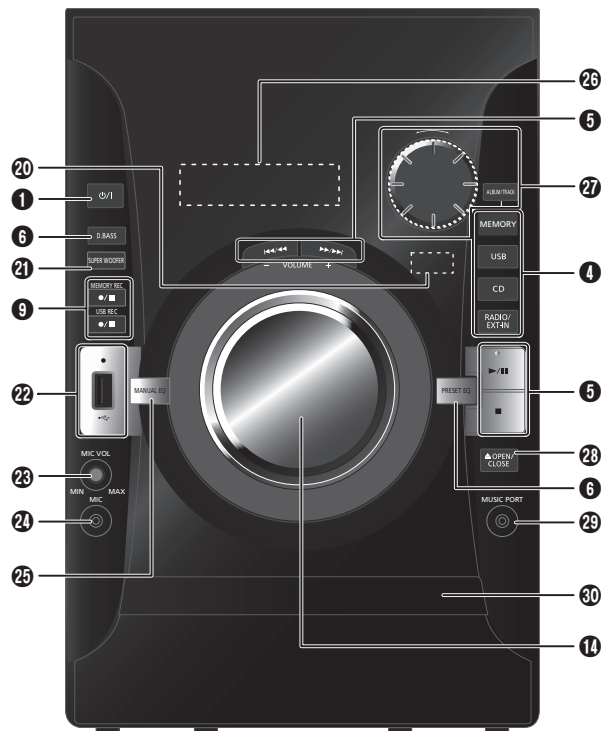
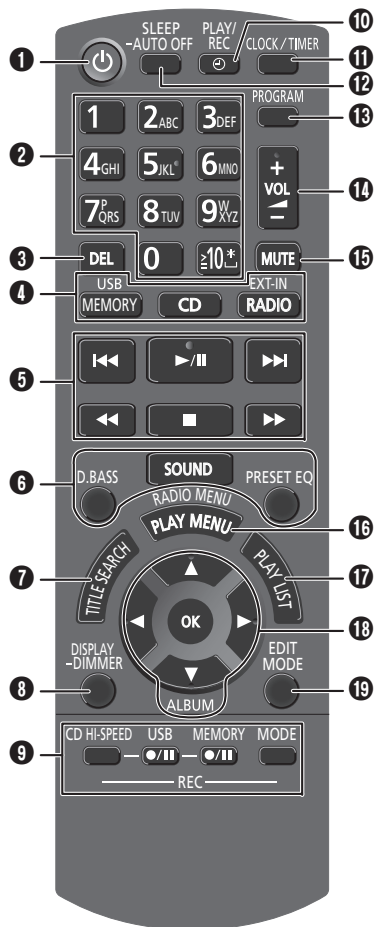
"NORMAL"

- The "INPUT LEVEL" of music port source automatically changes from "HIGH" to "NORMAL" when the system detects distorted music sounds.

"DEVICE FULL"

- You cannot do recording because the remaining recording time of the USB device is less than the total time of the music source.
Change to a USB device which has enough recording time and do the recording again.

Overview of controls



“USB OVER CURRENT ERROR”

- The USB device is drawing too much power. Disconnect the USB device, switch off the system and then switch on again.

“NODEVICE”

- The USB device is not connected. Examine the connection.

“NO TRACK”

- There is no album or track in the USB device or the internal memory.

System memory reset (initialisation)

Reset the memory when the following situations occur:

- There is no response when buttons are pressed.
- You want to clear and reset the memory contents.

1 Disconnect the AC mains lead.

2 While you press and hold [⏮] on the main unit, connect the AC mains lead again.
“-----” is shown.

3 Release [⏮].
All the settings are set back to the factory preset.
It is necessary to set the memory items again.

Remote control code

When other Panasonic equipment responds to the remote control of this system, change the remote control code for this system.

Preparation

Press [RADIO, EXT-IN] (main unit: [RADIO/EXT-IN]) to select “AUX” or “MUSIC PORT”.

To set the code to “REMOTE 2”

1 Press and hold [RADIO/EXT-IN] on the main unit and [2] on the remote control until “REMOTE 2” is shown.

2 Press and hold [OK] and [2] for a minimum of 4 seconds.

To set the code to “REMOTE 1”

1 Press and hold [RADIO/EXT-IN] on the main unit and [1] on the remote control until “REMOTE 1” is shown.

2 Press and hold [OK] and [1] for a minimum of 4 seconds.

Maintenance

To clean this system, wipe with a soft, dry cloth

- Never use alcohol, paint thinner or benzene to clean this system.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

- 1 Standby/on switch** [⏻], [⏻/⏹]
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.
- 2 Alphanumeric buttons**
To select a 2-digit number
Example: 16: [⏻10] → [1] → [6]
To set a character
Example: B: [2] → [2]
- 3 Delete a programmed track**
Delete a selected track in a playlist
- 4 Select audio source**
- 5 Basic playback control**
- 6 Select the sound effects**
- 7 Start the title search for internal memory**
- 8 View content information**
Decrease the brightness of the display panel
Press and hold the button to use this function.
To cancel, press and hold the button again.
- 9 Recording operation control**
- 10 Set the play timer and record timer**
- 11 Set the clock and timer**
- 12 Set the sleep timer**
Automatically switch off the system
When you are in disc, USB or internal memory source, the auto off function switches off the system if you do not use the system for 30 minutes.
Press and hold the button to use this function.
To cancel, press and hold the button again.
- 13 Set the program function**
- 14 Adjust the volume of the system**
- 15 Mute the sound of the system**
Press the button again to cancel.
"MUTE" is also canceled when you adjust the volume or when you switch off the system.
- 16 Set the play menu item**
Set the radio menu item
- 17 Make playlist for internal memory**
- 18 Select the option**
- 19 Set the edit mode for USB or internal memory**
- 20 Remote control sensor**
- 21 Set Super Woofer function**
- 22 USB port** (🔌)
USB recording indicator
- 23 Adjust the volume of the microphone**
- 24 Microphone jack**
- 25 Select the bass, mid or treble effect**
- 26 Display panel**
- 27 Browse tracks or albums**
(CD)
Turn the knob to browse the track.
Press [▶/||] to start playback from the selection.
(MP3)
Press [ALBUM/TRACK] to select album or track and then turn the knob to browse.
Press [▶/||] to start playback from the selection.
- 28 Open or close the disc tray**
- 29 Music port jack**
- 30 Disc tray**

Disc

Playing disc

- 1 Press [▲, OPEN/CLOSE] on the main unit to open the disc tray.
Put in a disc with the label facing up.
Press [▲, OPEN/CLOSE] again to close the disc tray.
- 2 Press [CD] and then press [▶/II] to start playback.

Stop playback	Press [■].
Pause playback	Press [▶/II]. Press again to continue playback.
Skip album (MP3)	Press [▲, ▼].
Skip track	Press [◀◀] or [▶▶] (main unit: [◀◀/◀◀] or [▶▶/▶▶]).
Search through track	Press and hold [◀◀] or [▶▶] (main unit: [◀◀/◀◀] or [▶▶/▶▶]).

Viewing available information

You can view the available information on the display panel.

Press [DISPLAY].

Note:

- Maximum characters that can be shown: approximately 32
- This system supports ver. 1.0 and 1.1 ID3 tags.
- Text data that the system does not support can show differently.


Play menu

- 1 Press [PLAY MENU] to select “PLAYMODE” or “REPEAT”.
- 2 Press [◀, ▶] and then press [OK] to select the desired mode.

PLAYMODE

OFF PLAYMODE	Play all tracks.
1-TRACK 1-TR	Play one selected track on the disc. Press the alphanumeric buttons to select the track.
1-ALB 1-ALB (MP3)	Play one selected album on the disc. Press [▲, ▼] to select the album.
RANDOM RND	Play a disc randomly.
1-ALBUM RANDOM 1-ALB RND (MP3)	Play all tracks in one selected album randomly. Press [▲, ▼] to select the album.

REPEAT


ON REPEAT 	Repeat playback.
OFF REPEAT	Cancel repeat playback.

Note:

- Playmode function does not work with “Program playback”.
- The setting returns to the default “OFF PLAYMODE” when you open the disc tray.

Program playback

This function allows you to program up to 24 tracks.

- 1 Press [PROGRAM] in the stop mode.
“PGM” is shown.
- 2  Press the alphanumeric buttons to select the desired track.
Do this step again to program other tracks.

(MP3)

1. Press [▲, ▼] to select the desired album.
 2. Press [▶▶] and then press the alphanumeric buttons to select the desired track.
 3. Press [OK].
- Do these steps again to program other tracks.

- 3 Press [▶/II] to start playback.

Cancel program mode	Press [PROGRAM] in the stop mode.
Check program contents	Press [◀◀] or [▶▶] when “PGM” is shown in the stop mode.
Clear the last track	Press [DEL] in the stop mode.
Clear all programmed tracks	Press [■] in the stop mode. “CLR ALL” is shown. Within 5 seconds, press [■] again.

Note:

The program memory is cleared when you open the disc tray.

Note on disc

- This system can play CD-R/RW with CD-DA or MP3 format content.
- Some CD-R/RW cannot be played because of the condition of the recording.
- MP3 files are defined as tracks and folders are defined as albums.
- This system can access up to:
 - CD-DA: 99 tracks
 - MP3: 999 tracks, 255 albums and 20 sessions
- Disc must conform to ISO9660 level 1 or 2 (except for extended formats).
- Recordings will not necessarily be played in the order you recorded them.

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

USB and internal memory

You can connect and play music tracks from your USB device.

You can also record sound or music tracks into the 2 GB internal memory in MP3 format.

This system can play or record up to 800 folders (maximum 999 tracks in an album) or a total of 8000 tracks, depending on the available storage capacity.

Connecting a USB device

Preparation

Before you connect a USB device to the system, make sure you do a backup of the data.

Do not use a USB extension cable. The system cannot recognize USB device connected through a cable.



Decrease the volume and connect the USB device to the USB port.

Hold the main unit when connecting or disconnecting the USB device.

Recording to a USB device or the internal memory

Panasonic cannot be held responsible on the action of consumer to record copyrighted contents which can cause copyright infringement.

- All recordings are in .mp3 format.
- You cannot do recording when you are using random playback mode.
- Repeat playback mode is off during recording.
- A new album is added each time you do a recording.
- The sequence of album can change after the recording.
- The recordings are kept in a folder named "REC_DATA" in the USB device.

Basic recording

1 Select the source you want to record.

Radio

Tune in to the radio station.

CD

Prepare the disc playback mode.

Record all tracks	Select "OFF PLAYMODE" (⇒ "Play menu").
Record programmed tracks	Program the tracks you want (⇒ "Program playback").
Record a single track	Select "1-TRACK" (⇒ "Play menu").

Make sure the disc is stopped.

External equipment:

Connect and play the equipment (⇒ "External equipment").

2 Press [●/II, USB REC] or [●/II, MEMORY REC] to start recording.

The name of the folder that keeps the recording is shown.

Stop recording	Press [■]. "WRITING" is shown.
Pause recording	Press [●/II, USB REC] or [●/II, MEMORY REC] during recording. Press again to continue recording. Note: You can pause during recording from the radio, music port or AUX (except in SYNCHRO mode). A track mark (⇒ "Adding track marks") is added every time you pause.

Note:

- Wait for a few seconds for the system to prepare the USB device before you start recording.
- USB recording indicator blinks during USB recording.

CD

- When the next track is being recorded, it will be shown on the display.

Recording MP3 tracks

MP3

You can record MP3 tracks in a disc to a USB device or the internal memory.

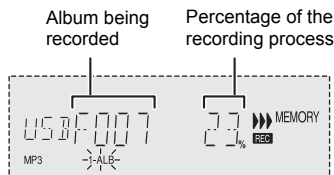
You can also record MP3 tracks from a USB device to the internal memory, or vice versa.

1 Prepare the source you want to record.

Record all tracks	Select "OFF PLAYMODE" (⇒ "Play menu").
Record programmed tracks	Program the tracks you want (⇒ "Program playback").
Record specified album or track	Select "1-ALBUM" or "1-TRACK" (⇒ "Play menu").

2 Press [●/II, USB REC] or [●/II, MEMORY REC] to start recording.

Example: Recording an album from the USB device to the internal memory.



Stop recording	Press [■]. Recording stops at the last fully recorded track in the album. Example: If you stop recording during the fourth track, only the first three tracks are recorded. "NO FILE RECORDED" is shown if no track is recorded.
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Note:

- Some tracks can use a longer time to record.
- Some MP3 tracks cannot be recorded because of the condition of the source.
- The recorded folder name may be different from the original folder because of the auto rename function.

Basic playback

1 Press [MEMORY, USB] to select "MEMORY" or "USB".

2 Press [▶/II] to start playback.

Stop playback	Press [■] during playback. Press [▶/II] to continue playback from the start of the track. OR Press [■] two times to stop the playback fully.
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For other operations, refer to "Disc".

Viewing available information

You can view the available information on the display panel.

Press [DISPLAY].

In the stop mode	Available storage space or remaining recording time of USB device or internal memory.
During recording	Information that is related to recording.
During playback or pause	Information of the current track.

Title search

MEMORY

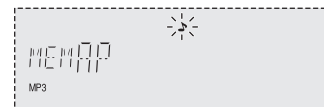
You can search for the desired track in the internal memory with title search.

1 Press [TITLE SEARCH].

"S" blinks.

2 Press the alphanumeric buttons or [▲, ▼] to select the desired character then press [▶] to select next character.

To delete a character, press [DEL].



3 Press [OK].

Press [◀, ▶] to search for previous or next match. "NOTFOUND" is shown if there is no match.

4 Press [OK] to confirm and play the track.
To cancel, press [TITLE SEARCH].

Note:


- This function skip tracks that are created with basic recording (⇒ "Basic recording").
- This function does not work with random or program playback.
- The character is not case sensitive.
- A same track title display will be shown for tracks with the same title.

Playlist

MEMORY

You can keep up to 10 playlists in the internal memory. Each playlist can keep up to 99 tracks.

- 1 Press [PLAYLIST].
- 2 Press [▲, ▼] to select the desired playlist.
- 3 Press [OK] to confirm.
“PL01 EMPTY” is shown if there is no track in the “PL01” playlist.
- 4 Press [▲, ▼] to select the desired album.
- 5 Press [◀◀] or [▶▶] to select the desired track.
- 6 Press [OK].
Press [EDIT MODE] and then do steps 4 to 6 again to add other tracks.
- 7 Press [▶/II] to start playback.

Cancel the playlist	Press [PLAYLIST] until “  ” has cleared.
Select other playlist	Press [PLAYLIST] and then [▲, ▼] to select the playlist.
Add tracks	In the stop mode, press [EDIT MODE] and then do steps 4 to 6 again to add other tracks.
View contents of the playlist	Press [◀◀] or [▶▶] in the stop mode.
Clear a single track	In the stop mode, press [◀◀] or [▶▶] to select the desired track you want to clear then press [DEL], “DELETE?” is shown. Within 5 seconds, press [OK].
Clear all tracks in a playlist	Press [■] in the stop mode, “CLEAR?” is shown. Within 5 seconds, press [OK].

Advanced recording functions

High-speed recording

CD

Recording speed:

CD: Three times (3x) the normal speed.
CD-RW: Two times (2x) the normal speed.

- 1 Put in the disc you want to record.
- 2 Press [CD].
- 3 Press [CD HI-SPEED REC] and [●/II, USB REC] or [●/II, MEMORY REC] together to start recording.

Note:

- If you cannot record at high-speed because of the condition of the disc, record the CD at normal speed.
- The sound is muted during high-speed recording.

Adding track marks

When recording from radio or external equipment, you can divide tracks using various modes.

Before recording

Press [REC MODE] to select the desired setting.

MANUAL	Add a track mark manually. Press [OK] during recording to add a track mark.
TIME MARK	A track is automatically divided at 5-minute intervals.
SYNCHRO (For music port or AUX source)	Recording starts automatically when the other equipment starts to play. Recording pause when it detects silence for 3 seconds.

Note:

- During recording, if you press [OK] or pause recording while using TIME MARK mode, the 5-minute counter is reset.
- You cannot add track marks manually in SYNCHRO mode.

Deleting the recorded tracks

- 1 Press [MEMORY, USB] to select “MEMORY” or “USB”.
- 2 Press [▲, ▼] to select the desired album.
- 3 Press [◀◀] or [▶▶] to select the desired track.
- 4 Press [EDIT MODE] to select the desired mode.

TRACKDEL	Delete a single track
ALBUMDEL	Delete one album (maximum 999 tracks)
FORMAT	Format the USB device
ALL DEL	Delete all albums in the internal memory

- 5 Press [OK].
The selected item to be deleted is shown.
- 6 Press [OK].
“SURE?NO” is shown.
- 7 Press [◀, ▶] to select “YES” or “NO” and then press [OK].
Select “YES” to confirm the deletion. “WRITING” is shown.

Note on USB

Compatible USB devices which are defined as mass storage class:

- USB devices that support bulk-only transfer.
- USB devices that support USB 2.0 full speed.

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.
- NTFS file system is not supported (only FAT 12/16/32 file system is supported).
- Some files can fail to work because of the sector size.

Radio

Manual tuning

- 1** Press [RADIO, EXT-IN] (main unit: [RADIO/EXT-IN]) to select “FM” or “AM”.
- 2** Press [◀◀] or [▶▶] to select the frequency of the required station.
To tune automatically, press and hold the button until the frequency starts changing quickly.
“ST” is shown when a stereo broadcast is being received.

Improving the sound quality

When “FM” is selected

- 1** Press [RADIO MENU] to select “FM MODE”.
- 2** Press [◀, ▶] to select “MONO” and then press [OK].
To cancel, select “STEREO”.
“MONO” is also canceled when you change the frequency.

When “AM” is selected

- 1** Press [RADIO MENU] to select “B.PROOF”.
- 2** Press [◀, ▶] to select “BP 1” or “BP 2” and then press [OK].

Memory presetting

30 FM and 15 AM stations can be preset.

Automatic presetting

- 1** Press [OK] to select “LOWEST” or “CURRENT” frequency.
- 2** Press [RADIO MENU] to select “A.PRESET” and then press [OK].
“START?” is shown.
- 3** Press [OK] to start presetting.
To cancel, press [■].

Manual presetting

- 1** Press [◀◀] or [▶▶] to tune in to the station.
- 2** Press [PROGRAM].
- 3** Press the alphanumeric buttons to select a preset number.
Do steps 1 through 3 again to preset more stations.
The new station replaces any station that occupies the same preset number.

Selecting a preset station

Press the alphanumeric buttons, [◀◀] or [▶▶] (main unit: [◀◀/◀◀] or [▶▶/▶▶]) to select the preset station.

AM allocation setting

By main unit only

This system can also receive AM broadcasts allocated in 10 kHz steps.

- 1** Press [RADIO/EXT-IN] to select “FM” or “AM”.
- 2** Press and hold [RADIO/EXT-IN].

After a few seconds, the display panel shows the current minimum radio frequency. Release the button when the minimum frequency changes.

- To go back to the initial setting, do the above steps again.
- After you change the setting, preset frequencies are erased.

Clock and timers

Setting the clock

This is a 24-hour clock.

- 1 Press [CLOCK/TIMER] to select “CLOCK”.
- 2 Within 10 seconds, press [▲, ▼] to set the time.
- 3 Press [OK].

Press [CLOCK/TIMER] to show the clock for a few seconds.

Note:

Reset the clock regularly to maintain accuracy.

Sleep timer

The sleep timer switches off the system after the set time.

Press [SLEEP] to select the setting (in minutes).

To cancel, select “OFF”.

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

To show the remaining time

Press [SLEEP].

Note:

- The play and sleep timer or the record and sleep timer can be used together.
- The sleep timer always comes first. Be sure not to set an overlap of timers.

Play and record timer

You can set the timer to come on at a certain time to:

- Wake you up (play timer)
- Record from the radio or external equipment (record timer)

Play timer and record timer cannot be used together.

Preparation

Set the clock.

- 1 Press [CLOCK/TIMER] to select “⏮PLAY” or “⏮REC”.
- 2 Within 10 seconds, press [▲, ▼] to set the start time.
- 3 Press [OK].
- 4 Do steps 2 and 3 again to set the end time.
- 5 Press [▲, ▼] to select the source you want to play or record.
- 6 Press [OK].
- 7 For record timer, press [▲, ▼] to select “USB” or “MEMORY” to keep the recording.
- 8 Press [OK].

To start the timer

- 1 Prepare the audio source.

Play timer	Prepare the music source you want to listen to (disc, USB, internal memory, radio or external equipment) and set the volume.
Record timer	Connect the USB (for USB recording) and tune to the radio station or select the external equipment.

- 2 Press [⏮, PLAY/REC].

“⏮” is shown.

To cancel, press [⏮, PLAY/REC] again.

The system must be switched off for the timer to operate.

To check the settings

Press [CLOCK/TIMER] to select “⏮PLAY” or “⏮REC”.

Note:

- The play timer starts at a low volume and increases gradually to the preset level.
- The record timer starts 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.
- If you switch off the system and switch on again while a timer is in operation, the timer will not stop at the end time.

Using a microphone

Preparation

Decrease the volume of the system to its minimum before you connect or disconnect a microphone.

- 1 Connect a microphone (not supplied) to the microphone jack.
Plug type: Ø 3.5 mm monaural
- 2 Turn [MIC VOL, MIN/MAX] on the main unit to adjust the volume of the microphone.

If you want to use the microphone with background music.

- 3 Play the music source and adjust the volume of the system.

Note:

- If a strange noise (howling) is emitted, move the microphone away from the speakers, or decrease the volume of the microphone.
- When you do not use the microphone, disconnect it from the microphone jack, and decrease the volume of the microphone level to “MIN”.

Sound effects

BASS MID TREBLE	<ol style="list-style-type: none"> 1. Press [SOUND] to select "BASS", "MID" or "TREBLE". 2. Press [◀, ▶] to adjust the level (-4 to +4). <p>By main unit only</p> <ol style="list-style-type: none"> 1. Press [MANUAL EQ] to select "BASS", "MID" or "TREBLE". 2. Press [◀◀/▶▶] or [▶▶/▶▶] to adjust the level.
SURROUND	<ol style="list-style-type: none"> 1. Press [SOUND] to select "SURROUND". 2. Press [◀, ▶] to select "ON SURROUND" or "OFF SURROUND".
SUPERWOOFER	<ol style="list-style-type: none"> 1. Press [SOUND] to select "SUPERWOOFER". 2. Press [◀, ▶] to select "SW1", "SW2", "SW3" or "OFF". <p>By main unit only</p> <p>Press [SUPER WOOFER] to select "SW1", "SW2", "SW3" or "OFF".</p>
INPUT LEVEL (For music port source)	<ol style="list-style-type: none"> 1. Press [SOUND] to select "INPUT LEVEL". 2. Press [◀, ▶] to select "NORMAL" or "HIGH".
RE-MASTER (MP3)	<ol style="list-style-type: none"> 1. Press [SOUND] to select "RE-MASTER". 2. Press [◀, ▶] to select "ON RE-MASTER" or "OFF RE-MASTER".
PRESET EQ	Press [PRESET EQ] to select "HEAVY", "SOFT", "CLEAR", "VOCAL" or "FLAT".
D.BASS	Press [D.BASS] to select "D.BASS", "AUTO D.BASS" or "OFF D.BASS".

External equipment

Before connection

- Disconnect the AC mains lead.
- Switch off all equipment and read the appropriate operating instructions.

Note:

Components and cables are sold separately.

Using the music port

You can play music from a portable audio equipment.

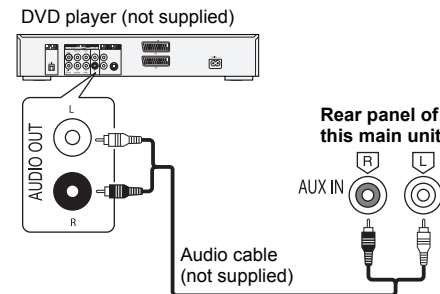
Preparation

Switch off the equalizer (if any) of the portable audio equipment to prevent sound distortion. Decrease the volume of the system and the portable audio equipment before you connect or disconnect the portable audio equipment.

- 1 Connect the portable audio equipment.**
Plug type: Ø 3.5 mm stereo (not supplied)
- 2 Press [RADIO, EXT-IN] (main unit: [RADIO/EXT-IN]) to select "MUSIC PORT".**
- 3 Play the portable audio equipment.**

Using the auxiliary input

You can connect a VCR, DVD player etc. and listen to the audio through this system.



- 1 Connect the external equipment.**
- 2 Press [RADIO, EXT-IN] (main unit: [RADIO/EXT-IN]) to select "AUX".**
- 3 Play the external equipment.**

Note:

- If you want to connect equipment other than those described, refer to the audio dealer.
- Sound distortion can occur when you use an adapter.

Specifications

Amplifier section

RMS output power stereo mode

Front Hi (both ch driven)	145 W per channel (5 Ω), 1 kHz, 10% THD
	190 W per channel (5 Ω), 1 kHz, 30% THD
Front Lo (both ch driven)	180 W per channel (4 Ω), 1 kHz, 10% THD
	235 W per channel (4 Ω), 1 kHz, 30% THD
Total RMS stereo mode power	650 W (10% THD)
	850 W (30% THD)

Tuner, terminals section

Preset station	FM 30 stations
	AM 15 stations

Frequency modulation (FM)

Frequency range	87.50 MHz to 108.00 MHz (50 kHz step)
Antenna terminals	75 Ω (unbalanced)

Amplitude modulation (AM)

Frequency range	522 kHz to 1629 kHz (9 kHz step)
	520 kHz to 1630 kHz (10 kHz step)

Microphone jack

Sensitivity	0.7 mV, 1.1 kΩ
Terminal	Mono, 3.5 mm jack (1 system)

Music port (front)

Sensitivity	100 mV, 4.7 kΩ
Terminal	Stereo, 3.5 mm jack

AUX input	RCA pin jack
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Disc section

Disc played (8 cm or 12 cm)	CD, CD-R/RW (CD-DA, MP3*)
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Pick up

Wavelength	790 nm (CD)
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Audio output (disc)

Number of channels	2 ch (FL, FR)
FL = Front left channel	
FR = Front right channel	
* MPEG-1 Layer 3	

Internal memory section

Memory

Memory size	2 GB
Media file format support	MP3 (*.mp3)

Memory recording

Bit rate	128 kbps
Memory recording speed	1x, 3x max (CD only)
Recording file format	MP3 (*.mp3)
Capacity of total songs recorded	510 songs
(use 128 kbps, approximately 1 song = 4 mins)	

USB section

USB port

USB standard	USB 2.0 full speed
Media file format support	MP3 (*.mp3)
USB device file system	FAT12, FAT16, FAT32
USB port power	500 mA (max)
Bit rate	16 kbps to 320 kbps (playback)

USB recording

Bit rate	128 kbps
USB recording speed	1x, 3x max (CD only)
Recording file format	MP3 (*.mp3)

Speaker section

Type	3 way, 3 speaker system (bass reflex)
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Speaker unit(s)

Super Woofer	20 cm cone type
Woofer	10 cm cone type
Tweeter	6 cm cone type

Impedance	5 Ω (high), 4 Ω (low)
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Output sound pressure	87 dB/W (1 m)
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Frequency range	48 Hz to 26 kHz (−16 dB)
	66 Hz to 20 kHz (−10 dB)

Dimensions (W x H x D)	250 mm x 429 mm x 274 mm
Mass	5.2 kg

General

Power supply	AC 220 to 240 V, 50 Hz
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Power consumption	108 W
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Dimensions (W x H x D)	220 mm x 334 mm x 245 mm
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Mass	3.2 kg
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Operating temperature range	0°C to +40°C
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Operating humidity range	35% to 80% RH (no condensation)
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Power consumption in standby mode
0.3 W (approximate)

Note:

- Specifications are subject to change without notice. Mass and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.