



Panasonic®

Operating Instructions

CD Stereo System

Model No. **SC-AKX30**

Dear Customer

Thank you for purchasing this product. For optimum performance and safety, please read these instructions thoroughly before connecting, operating or adjusting this product. Please keep this manual for future reference. These operating instructions are applicable to the following system.

System	SC-AKX30
Main unit	SA-AKX30
Speakers	SB-AKX30

Your unit may not look exactly the same as illustrated.

Customer Service

Customer Service Directory

Obtain information products and operative assistant; localize the closer distributor or Service Center; buy spare parts and accessories by our web site to Latin American:
<http://www.lar.panasonic.com>
Also you may contact us directly by our Contact Center:

Panama 800-PANA (800-7262)	Chile 800-390-602
Colombia 1-8000-94PANA (01-8000-947262)	From a cell phone: 797-5000
Ecuador 1800-PANASONIC (1800-726276)	Venezuela 800-PANA-800 (800-7262-800)
Costa Rica 800-PANA737 (800-7262737)	Uruguay 0-800-PANA (0-800-7262)
El Salvador 800-PANA (800-7262)	Peru 0800-00726
Guatemala 1-801-811-PANA (1-801-811-7262)	Argentina 0800-333-PANA (0800-333-7262) 0810-321-PANA (0810-321-7262)

Mexico Service

To obtain information in the Republic of Mexico contact us at:
email: atencion_clientes@mx.panasonic.com
Or you may contact us in the next following phones numbers: **01800-VIP-PANA (01800-847-7262)** - Interior
(55) 5000-1200 - Mexico D.F. and Metropolitan Area

Panasonic Corporation

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



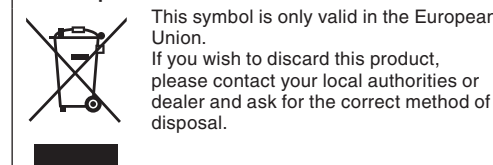
RQTX1100-M
L0110CH0

CAUTION	- CUIDADO: Evitar quemaduras o incendios.
WARNING	- Evitar fumar o usar mecheros, velas, veladoras, etc. cerca del aparato.
PRECAUCION	- Evitar quemaduras o incendios.

Inside of product

If you see this symbol -

Information on Disposal in other Countries outside the European Union



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

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

WARNING:
TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE,
• DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.
• USE ONLY THE RECOMMENDED ACCESSORIES.
• DO NOT REMOVE THE COVER (OR BACK); THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

SAFETY PRECAUTIONS

Placement	Foreign matter
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.	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.
Voltage	Service
Do not use high voltage power sources. This can overload the unit and cause a fire. Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other place where DC is used.	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 power cord and contact your dealer or an authorized service center. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons. Extend operating life by disconnecting the unit from the power source if it is not to be used for a long time.
AC power cord protection	
Ensure the power cord 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 power cord can cause electric shock. Do not handle the plug with wet hands. This can cause electric shock.	

PLACEMENT OF SPEAKERS

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

You cannot take the front net off the speakers.

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

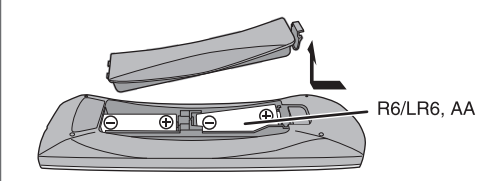
Caution

- 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.
- **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.**

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.

PREPARING THE REMOTE CONTROL



Use alkaline or manganese batteries.
Insert so the poles (+ and -) match those in the remote control.
Aim at the remote control signal sensor, 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.

Note on using the remote control

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

OPTIONAL EQUIPMENTS

Note:
All peripheral components and cables are sold separately.

Connecting to headphones

Connect headphones to the headphones jack (14). (Plug type: Ø 3.5 mm stereo)

- Avoid listening for prolonged periods of time to prevent hearing damage.
- Excessive sound pressure from earphones and headphones can cause hearing loss.
- Listening at full volume for long periods may damage the user's ears.

Be sure to use the supplied or recommended headphones or earphones.

Connecting to a portable audio equipment

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

Switch off the equalizer function (if there is any) of the portable audio equipment before you plug into the MUSIC PORT jack (13). Otherwise, sound from the speaker may be distorted.

Connecting to other external unit

You can connect to an analog player with a built-in phone equalizer.

- 1 Press [MUSIC P./AUX] (5) to select "AUX".
- 2 Play the external unit. (See the external unit's instruction manual.)

Note:

- When units other than those described above are to be connected, please consult your audio dealer.
- Sound distortion may occur when you use an adaptor other than the one supplied.

AVOID INTERFERING WITH OTHER PANASONIC EQUIPMENT

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 and hold [MUSIC P./AUX] (5) on the main unit and [2] (26) until the main unit's display shows "REMOTE 2".
- 2 Press and hold [OK] (4) and [2] (26) for at least 2 seconds.

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

MAKING THE CONNECTIONS

Connect the AC power supply cord only after all the other connections have been made.

Antenna connections
Place the antenna where reception is best.

FM indoor antenna
Adhesive tape

AM loop antenna
Stand the antenna up on its base. Click!

Power supply connection
Appliance inlet → Connector

Speaker connections
Connect the left (L) side in the same way

Please refer to "Connecting to other external unit" for more information on the AUX connection.

Please refer to "Connecting to other external unit" for more information on the AUX 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.

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

Note:

- The included AC power supply cord is for use with this unit only.
- Do not use it with other equipment.
- Do not use an AC power supply cord from other equipment.

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 do not solve the problem, consult your dealer for instructions.

Common problems

When the unit is in standby mode, the display lights up and changes continuously.

- Press and hold [M] (6) on the main unit to select "DEMO OFF".
- Check that the batteries are installed correctly.

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.

"humming" sound can be heard during play.

- An AC power supply cord or fluorescent light is near the unit. Keep other appliances and cords away from the unit.

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.

The total number of tracks displayed is incorrect. The disc cannot be read.

- 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.

Radio

Distorted sound or noise is heard.

- The stereo indicator flickers or does not light.
- Use an optional FM outdoor antenna. The antenna should be installed by a competent technician.

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.

A low hum is heard during AM broadcast.

- Separate the antenna from other cables and cords.

USB

The USB drive or its contents cannot be read.

- The USB drive format or its contents is/are not compatible with the system.
- The USB host function of this product may not work with some USB devices.
- USB devices with storage capacity of more than 32 gigabytes may not work in some instances.

Slow operation of the USB device.

- Large file size or high memory USB flash drive takes longer time to read.

Unit displays

"NO PLAY"

- Check the content.
- Only MP3 format files can be played.

"F1"

- Check and correct the speaker cords connection. If this does not fix the problem, consult the dealer.
- Disconnect the USB device. Turn the unit off and then turn back on.

"ERROR"

- Incorrect operation performed. Read the instructions and try again.

"ERROR" (during recording)

- You are not able to select other playback source (example: radio, USB and etc.) or press [←] [▶] / [⏪] [⏩] during recording.
- Stop the recording function.
- You are not able to open the disc tray when recording from AM source.
- Select a suitable recording mode (128 KBPS or 192 KBPS) and resume recording.

"PLAYBACK ERROR"

- An unsupported MP3 format is being played. The unit will skip that track and play the next one.

"VBR"

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

"HI-SPEED CAN'T REC"

- You cannot use high-speed recording while using analog mode. Change to digital mode or use normal recording.

"DEVICE FULL"

- You cannot perform 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 recording again.

System memory reset (Initialization)

When the following situations occur, refer to the instructions below to reset the memory:

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

To reset system memory

- 1 Disconnect the AC power supply cord. (Wait at least 3 minutes before proceeding to step 2.)
- 2 While pressing and holding down [⏪] (POWER) [2], reconnect the AC power supply cord.
"--- --" appears on the display panel [1].
- 3 Release [⏪] (POWER) [2].
All the settings are returned to the factory preset. You will need to reset the memory items.

SPECIFICATIONS

Amplifier section	Bit rate	128 kbps / 192 kbps / 320 kbps
RMS Output power stereo mode	USB recording speed	1x, 4x (CD only)
Front Ch (both channels drive)	Recording file format	MP3 (*.mp3)
160 W per channel (3 Ω, 1 kHz, 10% THD)		
PMPO output power		
320 W		
3500 W		
FM/AM tuner, terminals section	Memory	2 GB
Preset station	Memory file format support	MP3 (*.mp3)
FM 30 stations	Memory recording	
AM 15 stations	Bit rate	128 kbps / 192 kbps / 320 kbps
Frequency Modulation (FM)	Memory recording speed	1x, 4x (CD only)
Frequency range	Recording file format	MP3 (*.mp3)
87.9 MHz to 107.9 MHz (200 kHz step)	Capacity of total song recorded	510 songs
87.5 MHz to 108.0 MHz (100 kHz step)	(Use 128 kbps, approximately 1 song = 4 mins)	
75 Ω (unbalanced)	Speaker section	
Antenna terminals	Type	2 way, 2 speaker system (Bass reflex)
Amplitude Modulation (AM)	Speaker unit(s)	Full range 20 cm cone type
Frequency range	Terminal	3 Ω Tweeter 6 cm cone type
520 kHz to 1710 kHz (10 kHz step)	Output sound pressure	86 dB/W (1 m)
RCA pin jack	Frequency range	58 Hz to 21 kHz (~16 dB)
Aux input		75 Hz to 20 kHz (~10 dB)
Headphone jack	Sensitivity	Stereo, 3.5 mm jack
Terminal Stereo, 3.5 mm jack	Terminal	Stereo, 3.5 mm jack
Music port (front)		
Output level (CD, 1 kHz, -20 dB)		
32 Ω (Max)	Disc section	
Dimensions (WxHxD)	Disc played (8 cm or 12 cm)	
250 mm x 414 mm x 235 mm	(1) CD-Audio (CD-DA)	
Mass	(2) CD-R/RW (CD-DA, MP3* formatted disc)	
4.0 kg	(3) MP3*	
	* MPEG-1 Layer 3, MPEG-2 Layer 3	
	General	
	Power supply	AC 120 V, 60 Hz
	Power consumption	68 W
	Dimensions (WxHxD)	250 mm x 336 mm x 245 mm
	Mass	3.2 kg
	Operating temperature range	0°C to +40°C
	Operating humidity range	35% to 80% RH (no condensation)
	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)
	Bit rate	16 kbps to 320 kbps (playback)
	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 benzene to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

CONVENIENT FUNCTIONS

[AUTO OFF]

This auto off function allows you to turn off the unit in **disc, USB or memory** mode only after left unused for 10 minutes.

- Press and hold the button to activate the function.
- Press and hold the button again to cancel.
- The setting is maintained even if the unit is turned off.

[MUTE]

To mute the sound.

- Press the button to activate the function.
- Press the button again or adjust the volume to cancel.

[DIMMER]

To dim the display panel.

- Press the button to activate the function.
- Press the button again to cancel.

DISCS

Playing discs

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

2 Press [▶/II, CD] to start play.

Stop playback Press [■] (stop) during play.

Pause play Press [▶/II, CD] during play. Press again to resume play.

Skip album [MP3]
Press [▲/▼, ALBUM] to select the desired album during play or when in stop mode.
This function does not work during RANDOM mode.

Skip tracks During play Press [◀/▶, TRACK] or [▶/II, CD] to skip to your desired track.
While in stop mode Press [◀/▶, TRACK] or [▶/II, CD] followed by [▶/II, CD] to skip and play your desired track.

Alternatively, turn [TRACK] to skip and play your desired track.
• During random play (→ see "Play Mode function"), you cannot skip to tracks which have been played.
• You cannot use [TRACK] to skip track during random play.

Cancel program mode Press [PROGRAM] in the stop mode.

Replay the program Press [PROGRAM] then [▶/II, CD].

Add to the program In the stop mode, press [▶/II, CD] followed by [▶/II, CD] to add the current album to the program.

Search through tracks [CD]
Press and hold [◀/▶, TRACK] during play or pause to search.
• During program play, or random play (→ see "Play Mode function"), you can search only within the track.

Play Mode function

Press [PLAY MODE] to select the desired mode.

1-TRACK 1-TR Play one selected track on the disc. Press the numeric buttons to select the track. Play starts from the selected track.

1-ALBUM 1-ALB [MP3]
Play one selected album on the disc. Press [▲/▼, ALBUM] 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 [▲/▼, ALBUM] to select the album.

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

Note:
• You cannot use program mode together with "Play Mode function".
• The play mode setting is cleared when you open the disc tray.

Checking the track information

You can view the information of the current track from the display panel.

Press [DISPLAY] repeatedly during play or pause.

[CD]
Elapsed play time → Remaining play time

[MP3]
Elapsed play time → Remaining play time → Album name → Track name
↑ Bit rate (during play only) ← Tag (Artist) ← Tag (Track) ← Tag (Album)

Note:
• This unit supports ver. 1.0 and 1.1 ID3 tags.
• ID3 is a tag embedded in MP3 track to provide information about the track.
• Titles containing text data that the unit does not support may be differently displayed.

Repeat play

[CD] [MP3]
You can repeat program play (→ see "Program play") or other selected play mode (→ see "Play Mode function").

Press and hold [-REPEAT]. "REPEAT ON" and "C" are displayed.

To cancel
Press and hold [-REPEAT] again. "REPEAT OFF" is displayed and "C" is cleared.

Program play

This function allows you to program up to 24 tracks.

[CD]

1 Press [▶/II, CD] and then [■] (stop).

2 Press [PROGRAM]. "PGM" appears.

3 Press the numeric buttons to select your desired track. Repeat this step to program other tracks.

4 Press [▶/II, CD] to start play.

[MP3]

1 Press [▶/II, CD] and then [■] (stop).

2 Press [PROGRAM].

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

4 Press [◀/▶, TRACK] to select the track. To select a track directly, press the numeric buttons after pressing [◀/▶, TRACK].

5 Press [OK]. Repeat steps 3 to 5 to program other tracks.

6 Press [▶/II, CD] to start play.

For two-digit track, press [2-10] once then the two digits.

For three-digit track, press [2-10] twice then the three digits.

Cancel program mode Press [PROGRAM] in the stop mode.

Replay the program Press [PROGRAM] then [▶/II, CD].

Add to the program In the stop mode, press [▶/II, CD] followed by [▶/II, CD] to add the current album to the program.

Check program contents Press [◀/▶, TRACK] or [▶/II, CD] when "PGM" is displayed in the stop mode. To check while programming, press [PROGRAM] appears, then press [◀/▶, TRACK] or [▶/II, CD].

Repeat steps 3 to 5 in the stop mode.

Clear the last track Press [DEL] in the stop mode.

Clear all programmed tracks Press [■] (clear) in the stop mode. "CLR ALL" is displayed. Within 5 seconds, press the button again to clear all tracks.

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

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.

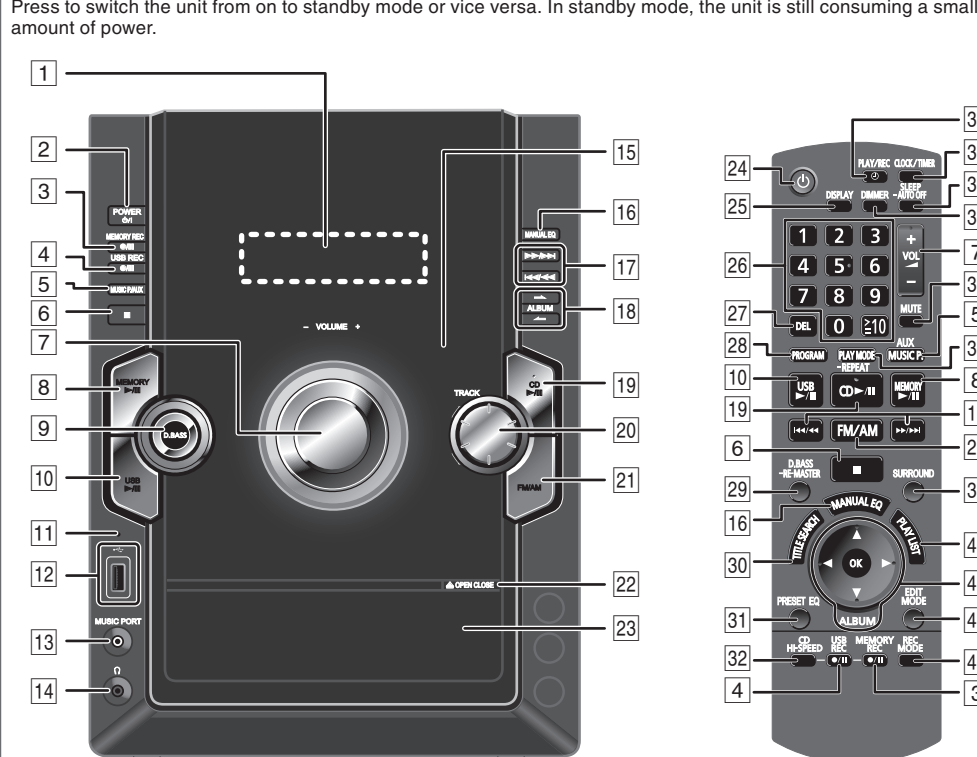
NOTE ON CDS
• This unit can access up to 99 tracks.
• This unit can play MP3 files and CD-DA format audio CD-R/RW that have been finalized.
• It may not be able to play some CD-R/RW due to the condition of the recording.
• Do not use irregularly shaped disc.
• Do not use disc with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.
• Do not attach extra labels or stickers on the disc.
• Do not write anything on the disc.

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.

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.

MAIN UNIT AND REMOTE CONTROL

Standby/on switch Press to switch the unit on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.



[◀/▶] These buttons have the exact same functions as those of [◀/▶].

[←/→, ALBUM] These buttons have the exact same functions as those of [▲/▼, ALBUM].

RADIO

Manual tuning

1 Press [FM/AM] to select "FM" or "AM".

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

3 Press [◀/▶, TRACK] 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 [◀/▶, TRACK] 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 [◀/▶, TRACK] once again.

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 the button, BP2 ↔ BP1

FM allocation setting
This system can also receive FM broadcasts allocated in 0.1 MHz steps.

To change the step to 0.1 MHz
1 Press and hold [FM/AM] on the main unit. After a few seconds the display changes to a flashing display of the current minimum frequency.
2 Continue to hold down [FM/AM].
• When the minimum frequency changes, release the button. To return to the original step, repeat the above steps.
• After changing the setting, previously preset frequency will be cleared.

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 the button, BP2 ↔ BP1

Automatic presetting
30 FM and 15 AM stations can be preset.
Preparation
Press [FM/AM] to select "FM" or "AM".
1 Press [OK] repeatedly to select either "CURRENT" or "LOWEST".
CURRENT Tuning begins from the current frequency.
LOWEST Tuning begins from the lowest frequency.

Manual presetting
30 FM and 15 AM stations can be preset.
Preparation
Press [FM/AM] to select "FM" or "AM".
1 Press [PLAY MODE] to select "MANUAL".
2 Press [◀/▶, TRACK] to tune to the required station.
3 Press [PROGRAM].
4 Press the numeric buttons to select a channel. The station occupying a channel is erased if another station is preset to that channel.
5 Repeat steps 2 to 4 to preset more stations.

Selecting a preset station
Press the numeric buttons to select a channel. For channels 10 to 30 press [2-10], then the two digits.
OR
1 Press [PLAY MODE] to select "PRESET".
2 Press [◀/▶, TRACK] to select the channel.

SOUND EFFECTS

Changing the sound quality: Preset EQ

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

HEAVY Adds punch to rock
CLEAR Clarifies higher frequencies
SOFT For background music
VOCAL Adds gloss to vocal
FLAT No effect

Enhancing the stereo sound: SURROUND sound
Enables you to add natural width and depth to the stereo sound.
To activate
Press [SURROUND] to display "|||||I" indicator.
To cancel
Press [SURROUND] again to clear "|||||I" indicator.

Note:
If interference in FM stereo reception increases, cancel the surround-sound effect.

Changing the sound quality: Manual EQ

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

BASS → MID → TREBLE
Original display

2 Press [◀/▶, TRACK] to adjust the level.
Note:
• The level of the pitch is between -4 to +4.
• The changes you make are stored and automatically recalled the next time you select "MANUAL EQ".

Changing the sound quality: RE-MASTER

[MP3]
This feature reproduces the frequencies lost during recording (original soundtrack) to give you a sound closer to the original.
Press and hold [-RE-MASTER] repeatedly to select either "ON RE-MASTER" or "OFF RE-MASTER".

Enjoying the bass: D.BASS

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

USB AND INTERNAL MEMORY

The USB connectivity enables you to record sound or music tracks from various sources to MP3 format and store into the USB mass storage device which can be played back. Typically, USB memory devices (bulk only transfer).

The 2 GB internal memory of this unit also allows you to store recorded sound or music tracks from various sources to MP3 format which can also be played back when desired.

You 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 mass storage device

Preparation
Before connecting any USB mass storage device to the unit, ensure that the data stored therein has been backed up.
It is not recommended to use a USB extension cable. The USB device connected via the cable will not be recognized by this unit.

Reduce the volume and connect the USB mass storage device to the USB port.
Note:
When you connect your digital audio player to the USB port, it charges all the time except in standby mode.

Checking the USB and internal memory status

You can check available storage space in the USB device or internal memory.

1 Press [▶/II, USB] or [▶/II, MEMORY] and then [■] (stop).
2 Press [DISPLAY] repeatedly in the stop mode.

Original display → Memory available storage space → USB remaining recording time

Original display → Memory remaining recording time → USB available storage space

Recording to a USB mass storage device or the internal memory
1 Press [▶/II, USB] or [▶/II, MEMORY] and then [■] (stop).
2 Press [DISPLAY] repeatedly during play or pause.

Stop recording Press [■] (stop). Recording stops at the last completed track in the album. "NO. FXXX" which is the folder name will be displayed. Example: If recording stops amidst the fourth track, only the first three tracks will be stored. "NO FILE RECORDED" is displayed if recording stops amidst the first track.

Erased a recorded track (→ see "Erasing the recorded tracks")

Note:
• Some files may take longer to record.
• Depending on the condition of the disc or file, some MP3 files may not be able to record.

Basic play
Press [▶/II, USB] or [▶/II, MEMORY] to start play.
Stop playback Press [■] (stop) during play. This unit memorizes the track at which you stopped. Playback will resume from that track. Press [▶/II, USB] or [▶/II, MEMORY] to resume play. OR Press [■] (stop) again to cancel the resume play function.

Pause play Press [PAUSE] during play. Skip tracks or Skip album These functions have similar operation as described in "Playing discs".

Checking the track information
You can view the information of the current track from the display panel.
Press [DISPLAY] repeatedly during play or pause.

[USB]
Elapsed play time → Remaining play time → Album name → Track name
↑ Bit rate (during play only) ← Tag (Artist) ← Tag (Track) ← Tag (Album)

[MEMORY]
Elapsed play time → Remaining play time → Album name → Track name
↑ Bit rate (during play only)

Title search
MEMORY
After a period of time, the number of MP3 tracks will increase in the internal memory storage. This is where the title search function comes in handy to enable you the convenience to search for your desired track.

1 Press [TITLE SEARCH] to start the search. "SP" indicator blinks.
2 Press [▲/▼] repeatedly to select the first character of the desired track.
▲: Search in descending order (other characters, 9 to 0, Z to A).
▼: Search in ascending order (A to Z, 0 to 9, other characters).
3 When there are more than one track that match with the selected character, press [◀/▶] repeatedly to search for your desired track.
4 Press [OK] to select and play the track.

Note:
• "RENAME" and "ALBUM" will be displayed when the system rearranges and renames the folders in ascending order.
• USB recording indicator blinks during USB recording.

Recording to a USB mass storage device or the internal memory
1 Press [▶/II, USB] or [▶/II, MEMORY] and then [■] (stop).
2 Press [DISPLAY] repeatedly during play or pause.

Stop recording Press [■] (stop). "WRITING" is displayed for a few seconds.

Pause recording Press [○/II, USB REC] or [○/II, MEMORY REC] during recording. Press again to resume recording.

Note:
Pause can only be performed during recording from the radio, music port or AUX source (except in SYNCHRO mode). A track mark (→ see "Adding track marks") is inserted every time you pause.

Erased a recorded track (→ see "Erasing the recorded tracks")

Note:
• "RENAME" and "ALBUM" will be displayed when the system rearranges and renames the folders in ascending order.
• USB recording indicator blinks during USB recording.

Checking the track information
While performing basic recording function (→ see "Basic recording"), you can view the information of the current track from the display panel.

Example: Display during CD recording
Elapsed play time → Remaining play time → REC mode
↑ USB remaining REC time ← MEMORY remaining REC time

Recording of MP3 tracks
[MP3]
You can record MP3 tracks stored in an album from the disc to a USB device or the unit's internal memory. Album recording can also be performed from the USB device to the internal memory and vice versa.

1 Press [▶/II, CD] or [▶/II, USB] or [▶/II, MEMORY] to select the source of the album you want to record and then press [■] (stop).
2 Press [▲/▼, ALBUM] to select your desired album.
3 Record to your desired storage location. Press [○/II, USB REC] or [○/II, MEMORY REC] to start recording.

Stop recording Press [■] (stop). Recording stops at the last completed track in the album. "NO. FXXX" which is the folder name will be displayed. Example: If recording stops amidst the fourth track, only the first three tracks will be stored. "NO FILE RECORDED" is displayed if recording stops amidst the first track.

Erased a recorded track (→ see "Erasing the recorded tracks")

Note:
• Some files may take longer to record.
• Depending on the condition of the disc or file, some MP3 files may not be able to record.

USB AND INTERNAL MEMORY (continued)

Play List

MEMO
You can store up to 10 play lists. Each play list stores up to 99 tracks.

1 Press [▶/II, MEMORY] and then [■] (stop).
2 Press [PLAY LIST].
3 Press [▲/▼] to select your desired play list.
4 Press [OK] to confirm. "PL01 EMPTY" is displayed if no track is found in play list named "PL01".

5 Press [▲/▼] to select your desired album.
6 Press [▶/II, CD] to select the track.
7 Press [OK] to store the selected track.
8 Press [EDIT MODE] and then repeat step 5 to 7 to store other tracks.
9 Press [▶/II, MEMORY] to start play.

Adding track marks
When recording from analog source such as radio, music port or AUX, you may want to separate the sound or music track at desired point during recording. You can perform this separation by adding track marks using the various listed modes.
Before recording
Press [EDIT MODE] repeatedly to select your desired track mark mode.
Radio: MANUAL ↔ TIME MARK
MUSIC PORT or AUX: MANUAL → SYNCHRO → TIME MARK

Note:
• If you press [OK] or pause recording while using TIME MARK mode during recording, the five-minute counter will be reset.
• You cannot insert track marks manually in SYNCHRO mode.

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

1 Press [▶/II, USB] or [▶/II, MEMORY] and then [■] (stop).
2 Press [▲/▼] to select your desired album or track.
3 Press [EDIT MODE] repeatedly to select the desired erasing mode.

[USB]
TRACKDEL → ALBUM DEL → FORMAT
Original display
[MEMORY]
TRACKDEL → ALBUM DEL → ALL DEL
Original display

TRACKDEL Erase single track
ALBUMDEL Erase one album
FORMAT Format the USB device
ALL DEL Erase all albums

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.

High-speed recording
[CD]
Recording speed:
CD : Four times (maximum of 4x) the normal speed.
CD-RW : Two times (2x) the normal speed.

1 Insert the disc you want to record.
2 Press [▶/II, CD] and then [■] (stop).
To record a specific track, press [PLAY MODE] to select 1-TRACK.

3 Press [CD HI-SPEED] and [○/II, USB REC] or [○/II, MEMORY REC] simultaneously to start recording.

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.

Recording from CD using analog format
[CD]
You can change your recording mode from the default digital recording to analog recording.

1 Press [▶/II, CD] and then [■] (stop).
2 Press and hold [EDIT MODE] to select "ANALOG-REC".
Each time you press and hold the button:
ANALOG-REC (analog recording) ↔ DIGITAL-REC (digital recording)

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

Recording mode
You can select the desired recording mode before you start the basic recording (→ see "Basic recording").
Press [REC MODE] repeatedly to select your desired setting.

128 KBPS → 192 KBPS → 320 KBPS

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.

Supported format
• 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.