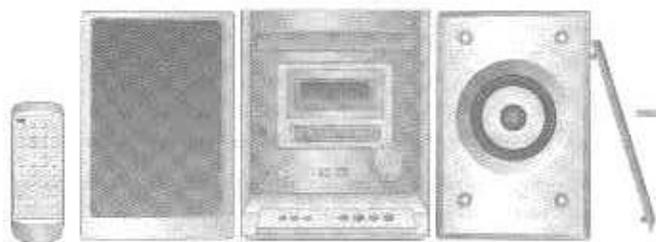


Panasonic®

CD Stereo System

Operating Instructions



Model No. **SC-PM07**



COMPACT
disc
DIGITAL AUDIO

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

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-PM07
Main unit	SA-PM07
Speakers	SB-PM07

The model number and serial number of this product can be found on either the back or the bottom of the unit. Please note them in the space provided below and keep for future reference.

MODEL NUMBER _____

SERIAL NUMBER _____

User memo:

DATE OF PURCHASE _____

DEALER NAME _____

DEALER ADDRESS _____

TELEPHONE NUMBER _____

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.

CAUTION:

TO PREVENT ELECTRIC SHOCK MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

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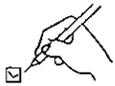
CAUTION!

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.

CAUTION!

DO NOT INSTALL, OR PLACE THIS UNIT, IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.

Supplied accessories



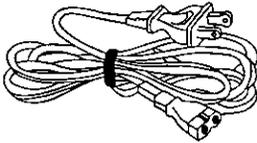
Please check and identify the supplied accessories.

Use numbers indicated in parentheses when asking for replacement parts.

(Only for U.S.A.)

To order accessories contact 1-800-332-5368 or web site (<http://www.panasonic.com>).

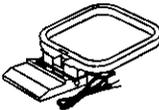
- AC power supply cord 1 pc.
(RJA0065-A)



- FM indoor antenna 1 pc.
(RSA0006-L)



- AM loop antenna 1 pc.
(RSA0033A-1)



- Remote control transmitter 1 pc.
(EUR648260)



- Remote control batteries 2 pcs.



THE FOLLOWING APPLIES ONLY IN THE U.S.A.

CAUTION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Before use

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit. Follow the safety instructions on the unit and the safety precautions listed below. Keep these operating instructions handy for future reference.

Safety

- 1. Power source**—Connect the unit to a power source of the type described in these instructions or as marked on the unit.
- 2. Polarization**—The unit is equipped with a polarized power plug where one blade is wider than the other. This safety feature ensures that the plug fits into your household AC outlet only one way. If the plug doesn't fit one way, try reversing it. If the plug still doesn't fit, contact an electrician to replace the obsolete outlet. Do not attempt to defeat the safety purpose of the plug.
- 3. Power cord protection**—Route the AC power supply cord so that it will not be walked on or pinched by items placed on or against it. Never take hold of the plug or cord with wet hands. Always grasp the plug body firmly when connecting and disconnecting it.
- 4. Overloading**—When connecting the AC power supply cord, be careful not to overload the household AC outlet, extension cord, or outlet from any other device as this can result in fire or electric shock.
- 5. Nonuse periods**—Turn the unit off when it is not in use. Unplug the unit from the household AC outlet if it is not to be used for a long time. Unplug the unit during lightning storms.
- 6. Attachments and accessories**—Use only the attachments and accessories recommended in these operating instructions.

Installation

Placement

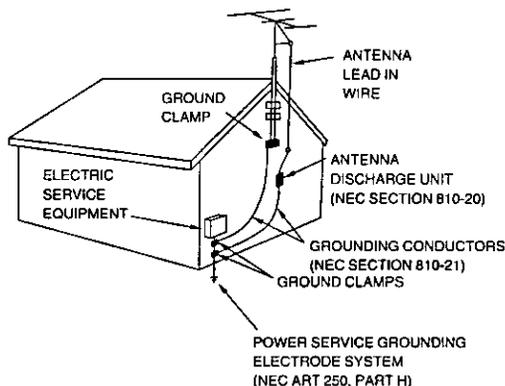
- 1. Ventilation**—Situate the unit so that it receives proper ventilation. Do not install in a confined space such as a bookcase or cabinet. Allow at least 10 cm (4 inches) clearance from the rear of the unit. To prevent the risk of electric shock or fire due to overheating ensure curtains and other materials do not obstruct the unit's ventilation.
- 2. Foreign material**—Ensure objects and liquids do not get into the unit. Avoid exposing the unit to excessive smoke, dust, mechanical vibration, and shock.
- 3. Magnetism**—Situate the unit away from equipment and devices that generate strong magnetic fields.
- 4. Stacking**—Do not place heavy objects on top of this unit.
- 5. Surface**—Place the unit on a flat, level surface.
- 6. Carts and stands**—Use the unit only with carts and stands recommended by the manufacturer. Move carts with care. Sudden stops, excessive force, and uneven surfaces can cause carts to overturn.
- 7. Wall and ceiling mounting**—Do not mount the unit on walls or ceilings unless specified in the instructions.



Environment

- 1. Water and moisture**—Do not use the unit near water, such as near a bathtub or swimming pool. Avoid damp basements.
- 2. Heat**—Situate the unit away from heat sources, such as radiators. Do not situate where temperatures fall below 5°C (41°F) or rise above 35°C (95°F).

- 3. Power lines**—Take care when setting up an outdoor antenna that it is not near overhead power lines, electric lights, or electrical circuits, and that there is no danger of the antenna falling on power lines, electric lights, or electrical circuits. When installing an outdoor antenna, take extreme care not to touch such power lines or circuits, as contact with them can be fatal.
- 4. Outdoor antenna grounding**—If you connect an outdoor antenna, ground the antenna system to protect against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1990, provides information about grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. Refer to this diagram.



NEC—NATIONAL ELECTRICAL CODE

Maintenance

(See page 23 for details.)

Unplug the unit from the household AC outlet before cleaning.

Clean with a damp cloth.

Do not use abrasive pads, scouring powders, or solvents.

Service

- 1. Damage requiring service**—The unit should be serviced by qualified service personnel if:
 - (a) The AC power supply cord or the plug has been damaged; or
 - (b) Objects or liquids have gotten into the unit; or
 - (c) The unit has been exposed to rain; or
 - (d) The unit does not operate normally or exhibits a marked change in performance; or
 - (e) The unit has been dropped or the cabinet damaged.
- 2. Servicing**—Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- 3. Replacement parts**—When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- 4. Safety check**—After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

Listening caution



Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion—and, most importantly, without affecting your sensitive hearing.

We recommend you to avoid prolonged exposure to excessive noise.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

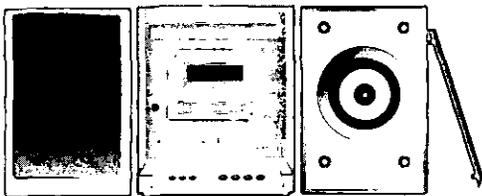
Once you have established a comfortable sound level:

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

Placement of speakers

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

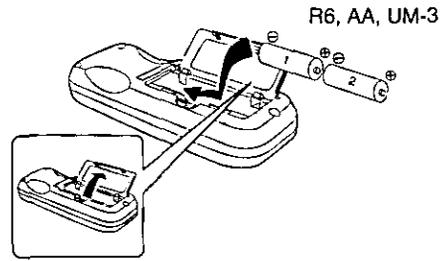


Notes

- Keep your speakers at least 10 mm ($13/32$ ") 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.
- To avoid damage to the speakers, do not touch the speaker cones if you have taken the nets off.

The remote control

Battery Installation



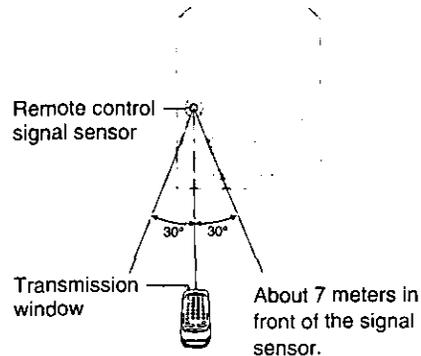
Use of batteries

- Align the poles (+ and -) properly when inserting the batteries.
- Do not mix old and new batteries or different types of batteries.
- Do not recharge ordinary dry cell batteries.
- Do not heat or disassemble the batteries. Do not allow them to contact flame or water.
- Remove the batteries if the unit is not to be used for a long time.
- Do not keep together with metallic objects such as necklaces.
- Do not use rechargeable type batteries.
- Do not use batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.

If electrolyte leaks from the batteries, consult your dealer. Wash thoroughly with water if electrolyte comes in contact with any part of your body.

Correct method of use



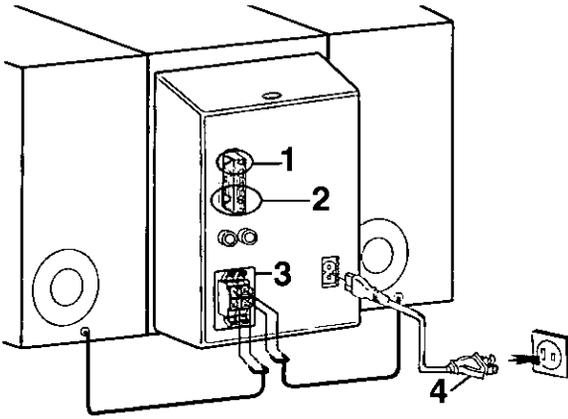
Operations notes

- Do not place obstacles between the remote control signal sensor and remote control unit.
- Do not expose the remote control signal sensor to direct sunlight or to the bright light of a fluorescent light.
- Take care to keep the remote control signal sensor and end of the remote control unit free from dust.
- If this system is installed in a rack with glass doors, the glass doors' thickness or color might make it necessary to use the remote control unit a shorter distance from the system.

To prevent damage

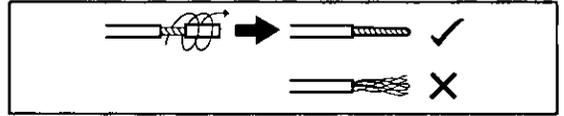
- Never place heavy items on top of the unit.
- Do not disassemble or reconstruct the unit.
- Do not spill water or other liquids into the unit.

Before use



Connections

- Plug the AC power supply cord into a household AC outlet socket only after all other connections have been made.
- To prepare the AM loop antenna wire and speaker cords, twist the vinyl cover tip and pull off.



1 Connect the FM indoor antenna.

Tap the antenna to a wall or column, in a position where radio signals are received with the least amount of interference.

Note

For the best reception:

An FM outdoor antenna is recommended. (→ page 7)

2 Connect the AM loop antenna.

After attaching the antenna, turn on the system and tune in a broadcast station. Put the antenna where the reception is best and interference is minimal.

3 Connect the speaker cables.

Connect each end of the speaker cables to the terminal lever of the same colour so (+) and (-) are correct. Never allow the exposed wires to contact each other when connected.

Incorrect connection can damage the unit.

Caution

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.

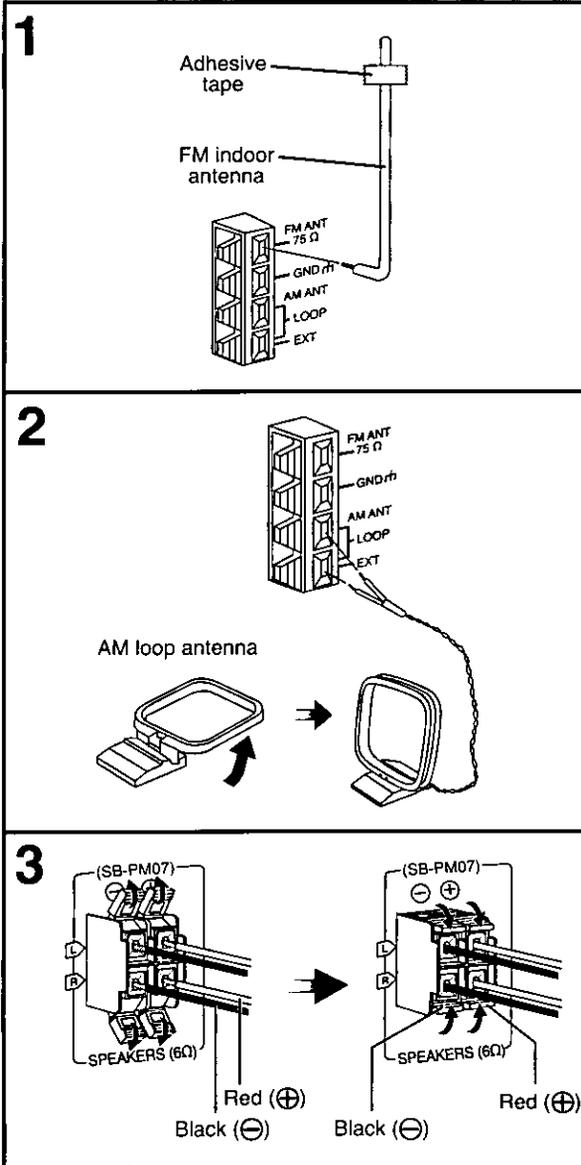
Caution

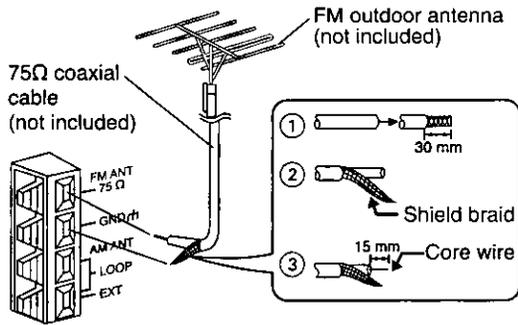
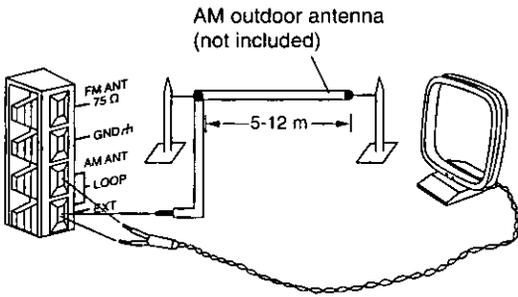
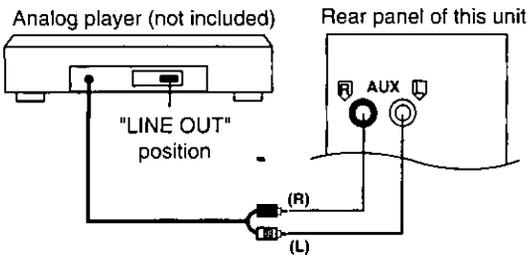
- Use the speakers only with the recommended system. Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.
- Do not attach these speakers to walls or ceilings.

4 Connect the AC power supply cord.

Note

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



A**B****C**

Connections

Optional antenna connections

You may need an outdoor antenna if you use this system in a mountainous region or inside a reinforced-concrete building, etc.

A FM outdoor antenna

Disconnect the FM indoor antenna if an FM outdoor antenna is installed.

Note

An outdoor antenna should be installed by a qualified technician only.

B AM outdoor antenna

Connect the outdoor antenna without removing the AM loop antenna. Run 5 to 12 m of vinyl-covered wire horizontally along a window or other convenient location.

Note

When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during an electrical storm.

External unit connections

- Make sure that the power supply for all components has been turned off before making any connections.
- For details, refer to the operating instructions of the unit which is to be connected.
- All peripheral components and cables sold separately.

C Connecting analog equipment

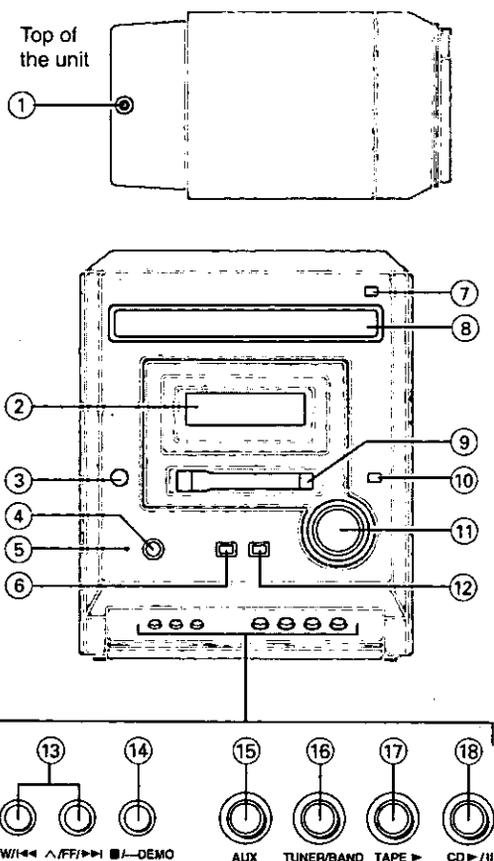
This example shows how to connect an analog player with a PHONO OUT/LINE OUT switch. When units other than those described are to be connected, please consult your audio dealer.

Note

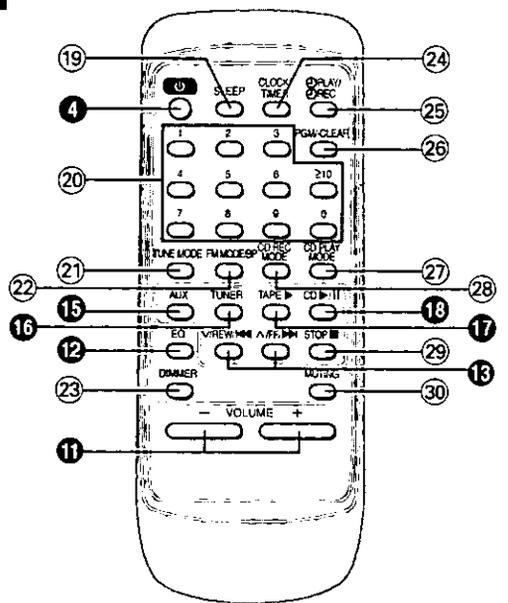
- Only an analog player with a built-in phono equalizer can be connected.
- Set the switch to the "LINE OUT" position at the back of the analog player.

Before use

A



B



Front panel controls

A Main unit

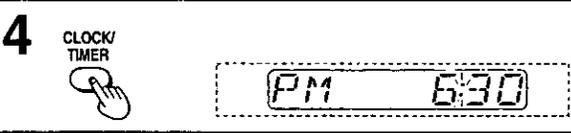
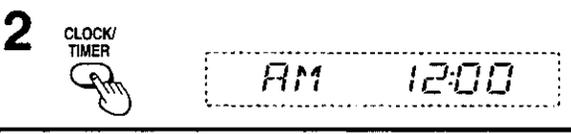
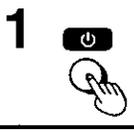
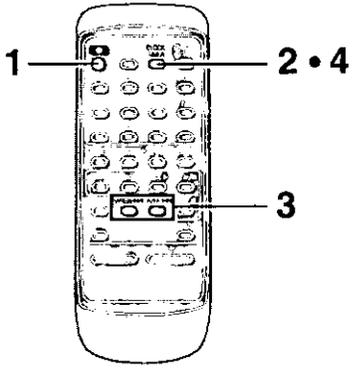
- ① Headphone jack (PHONES) 19
- ② Display
- ③ Remote control signal sensor
- ④ Standby/on switch (POWER ϕ /I)
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- ⑤ AC supply indicator (AC IN)
This indicator lights when the unit is connected to the AC mains supply.
- ⑥ Recording start/pause button (●REC/II) 16, 17
- ⑦ CD tray open/close button (OPEN/CLOSE \triangle) 12
- ⑧ CD Tray
- ⑨ Cassette slot
- ⑩ Cassette eject button (EJECT \triangle) 15
- ⑪ Volume control (VOLUME DOWN, UP) 10, 12, 15
- ⑫ Preset EQ select button (PRESET EQ) 19
- ⑬ CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust buttons (∇ /REW/◀◀, ▲/FF/▶▶) 9, 10, 11, 12, 15, 20
- ⑭ Stop, demonstration, TAPE/CD mode select button (■/DEMO) 9, 12, 15, 16
- ⑮ Aux button (AUX) 19
- ⑯ Tuner/band select button (TUNER/BAND) 10
- ⑰ Cassette play button (TAPE ▶) 15
- ⑱ CD play/pause button (CD ▶/II) 12

B Remote Control

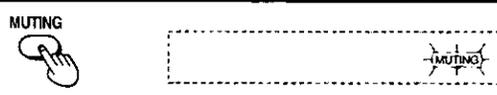
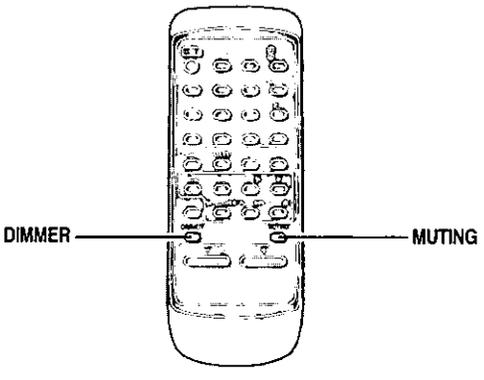
Buttons such as ④ function in exactly same way as the buttons on the main unit.

- ⑲ Sleep timer button (SLEEP) 21
- ⑳ Numeric buttons 11, 13
- ㉑ Tuning mode select button (TUNE MODE) 10, 11
- ㉒ FM mode BP button (FM MODE/BP) 10, 16
- ㉓ Dimmer button (DIMMER) 9
- ㉔ Clock/timer button (CLOCK/TIMER) 9, 20, 21
- ㉕ Play timer/recording timer button (⊙PLAY/⊙REC) 20
- ㉖ CD Program/clear, tuner preset button (PGM-CLEAR) 11, 14
- ㉗ CD Play mode select button (CD PLAY MODE) 13
- ㉘ CD recording mode button (CD REC MODE) 18
- ㉙ Stop, TAPE/CD mode select button (STOP ■) 13
- ㉚ Muting button (MUTING) 9

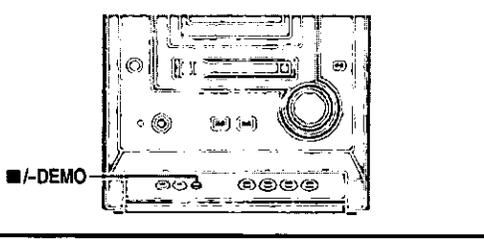
A



B



C



A Setting the time

By remote control only

This is a 12-hour clock.
The example shows how to set the clock for 6:30 pm.

- 1** Press [⏻] to turn the unit on.
- 2** Press [CLOCK/TIMER] to select Clock.
Every time you press the button:
- 3** Within 10 seconds
Press [V/REW/◀◀] or [^/FF/▶▶] to set the time.
Press and hold to change the time faster.
- 4** Press [CLOCK/TIMER].
The time is set and the original display is restored.

Displaying the clock when the unit is ON:

Press [CLOCK/TIMER].
The clock is shown for about 10 seconds.

Note

The clock may lose or gain some time over a period.
Readjust if necessary.

B Convenient Functions

To dim the display panel

By remote control only

Use this when you are going to sleep or any other time you would prefer the panel to be dimmer.

Press [DIMMER].
The display panel dims except for the [AC IN] indicator.

To cancel

Press [DIMMER] again.

To mute the volume

By remote control only

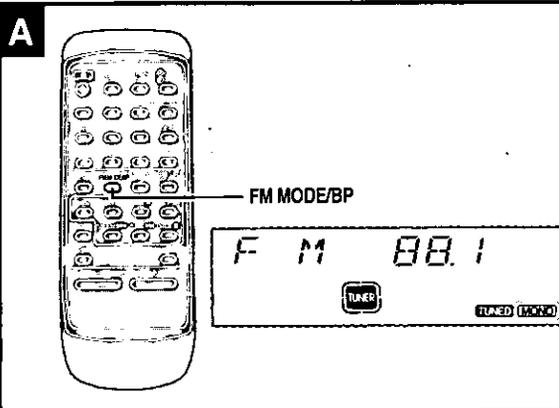
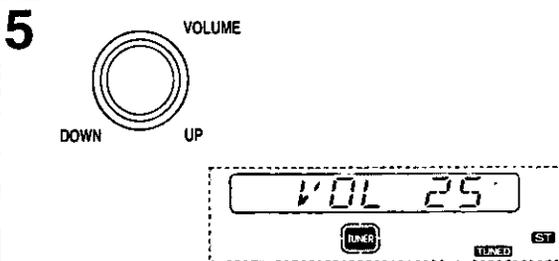
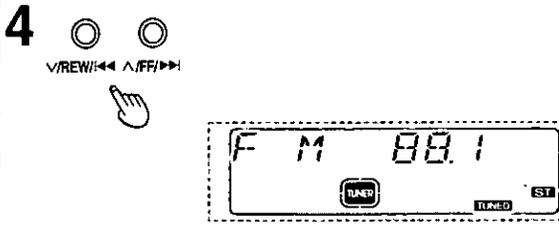
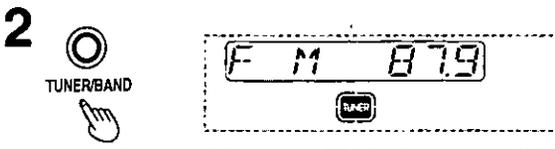
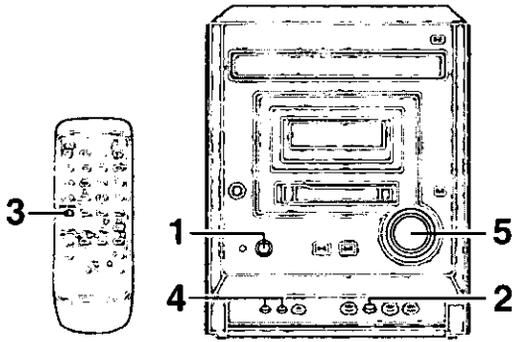
This feature is convenient when you have a telephone call, etc.

Press [MUTING].
Press the button again to cancel. ("MUTING" goes out.)
Muting can also be cancelled by lowering the volume all the way to "0".
When the system is turned off, the muting operation will be automatically cancelled.

C Turning the demo function off

If the clock has not been set, a demonstration of the display is shown when the unit is switched to standby.
This function is set to on at the time of purchase.

Press and hold [■-/DEMO] until "DEMO OFF" is displayed.
The display changes each time the button is held down.
DEMO OFF (off) ↔ DEMO ON (on)



The radio: manual tuning

- 1** Press [POWER] to turn the unit on.
- 2** Press [TUNER/BAND] to select "FM" or "AM".
Every time you press the button:
FM \rightleftharpoons AM
- 3** Press [TUNE MODE] on the remote control to select the manual tuning mode.
Make sure that "PROGRAM" is not displayed.
- 4** Press [∇ /REW/| \lll] or [\wedge /FF/| \ggg] to select the frequency of the required station.
"TUNED" is displayed when a radio station is tuned.
"ST" is displayed when a stereo FM broadcast is being received.
- 5** Adjust the volume.

Auto tuning

Press and hold [∇ /REW/| \lll] or [\wedge /FF/| \ggg] for a moment until the frequency starts changing rapidly. The unit begins auto tuning, stopping when it finds a station.

- Auto tuning may not function when there is excessive interference.
- To cancel auto tuning, press [∇ /REW/| \lll] or [\wedge /FF/| \ggg] once again.

A If noise is excessive in FM

By remote control only

Press [FM MODE/BP] to display "MONO".

This mode improves sound quality if reception is weak, but broadcasts will be heard in monaural.

Press [FM MODE/BP] again to cancel the mode.

"MONO" goes out. MONO is also cancelled if the frequency is changed.

Turn off "MONO" for normal listening. Stereo and monaural broadcasts are automatically played as they are received.

FM allocation setting

By adjusting the allocation, you can enable this tuner to receive FM broadcasts allocated in 0.1 MHz steps.

Preparation:

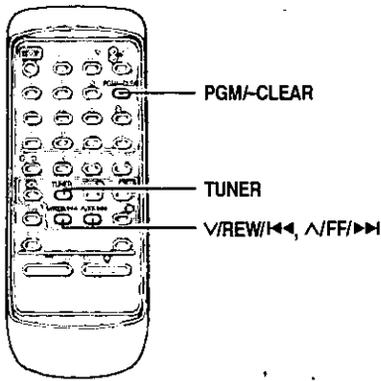
Press [TUNER/BAND] to select "AM".

Press and hold [TUNER/BAND]. After a few seconds, the display will change to a flashing display of the current minimum FM frequency. If you continue to hold the button down, the minimum frequency will change. Release the button at this time.

To return to the original frequency indication, repeat above.

Note

- After changing the "allocation" setting, the frequencies you previously preset in the memory will be cleared.
- Sound is momentarily interrupted if you load/unload tapes while listening to an AM broadcast.

A

PGM-CLEAR

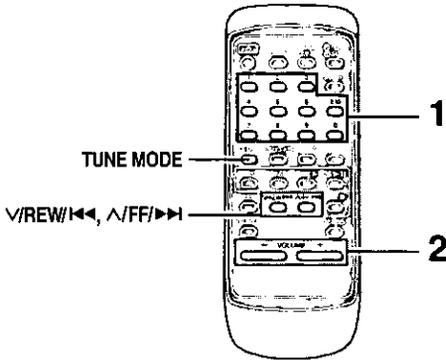


F M 88.1

PROGRAM

F M 88.9

PROGRAM

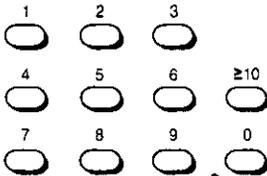
B

TUNE MODE

V/REW/FF

1

2

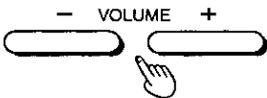
1

Preset channel

F M 2

PROGRAM

TUNER

2

The radio: preset tuning

By remote control only

There are two methods of pre-setting stations.

Automatic presetting: All the stations the tuner can receive are preset.

Manual presetting: You can select the stations to pre-set and the order they are preset in.

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

Preparation:

Press [TUNER] to select "FM" or "AM".

A Automatic pre-setting

Do the following once each for FM and AM.

Preparation:

Tune to the frequency where pre-setting is to begin (→ page 10).

Press and hold [PGM-CLEAR].

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

Manual pre-setting

Pre-set the stations one at a time.

- ① Press [PGM-CLEAR] then press [V/REW/FF] or [V/REW/FF] to tune to the required station.
- ② Press [PGM-CLEAR] then press [V/REW/FF] or [V/REW/FF] to select a channel.
- ③ Press [PGM-CLEAR].

The station occupying a channel is erased if another station is preset in that channel.

B Selecting channels

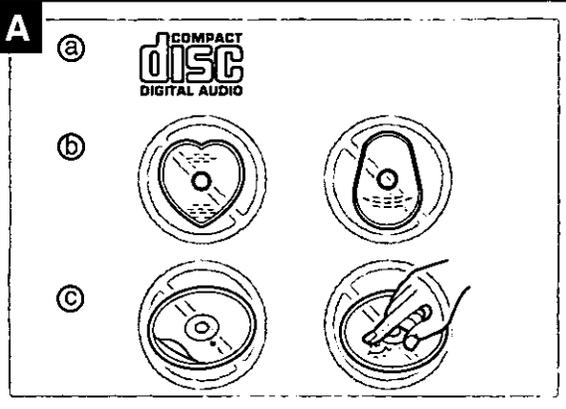
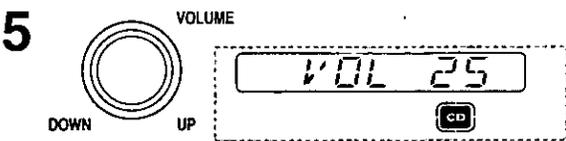
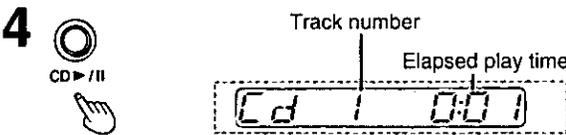
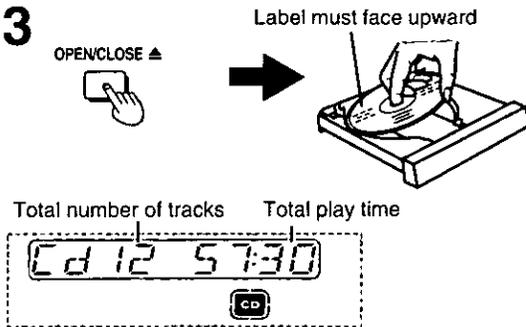
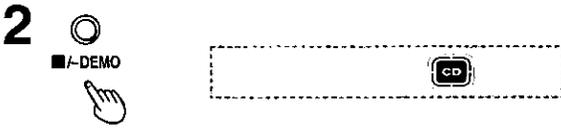
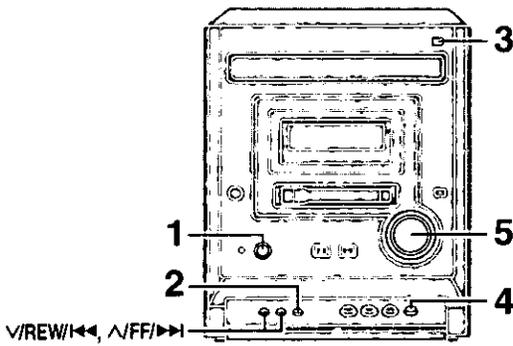
- 1** Press the numbered buttons to select the channel.

For channels 1 to 9, press the corresponding number.

For channels 10 to 15, press [≥10], then the two digits.

OR

- ① Press [TUNE MODE] to select "PROGRAM".
 - ② Press [V/REW/FF] or [V/REW/FF] to select the channel.
- 2** Adjust the volume.



CDs

This unit can play CD-DA (digital audio) format audio CD-R and CD-RW that have been finalized (a process that enables CD-R/CD-RW players to play audio CD-R and CD-RW) upon completion of recording. It may not be able to play some CD-R or CD-RW due to the condition of the recording.

- 1** Press [POWER ϕ /I] to turn the unit on.
- 2** Press [\blacksquare /-DEMO] to select the CD mode.
Every time you press the button:
TAPE \leftrightarrow CD
- 3** Press [OPEN/CLOSE \triangle] to open the tray, load a CD, and press [OPEN/CLOSE \triangle] to close the tray.
- 4** Press [CD \blacktriangleright /II] to start play.
Plays to the end of the CD and stops.
- 5** Adjust the volume.

To stop the disc
Press [\blacksquare /-DEMO].

To pause play
Press [CD \blacktriangleright /II]. Press [CD \blacktriangleright /II] again to resume play.

Skipping tracks
Press [V/REW/I<<<] (backward) or [^/FF/>>>] (forward).

Searching through tracks
During play or pause
Press and hold [V/REW/I<<<] (backward) or [^/FF/>>>] (forward).

One touch play
When a CD is loaded and the unit is off, press [CD \blacktriangleright /II]. The unit comes on and starts play.

To remove a CD
Press [OPEN/CLOSE \triangle].

Note

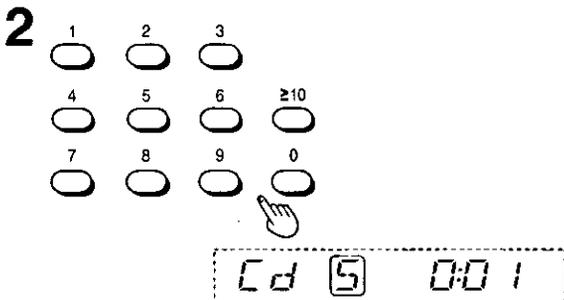
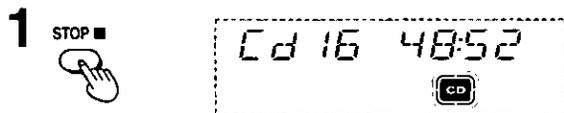
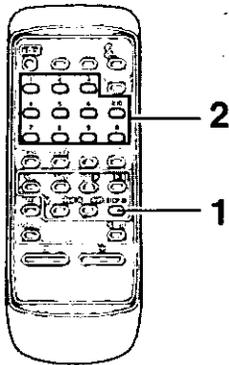
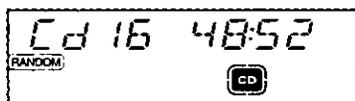
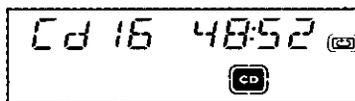
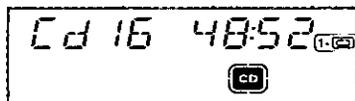
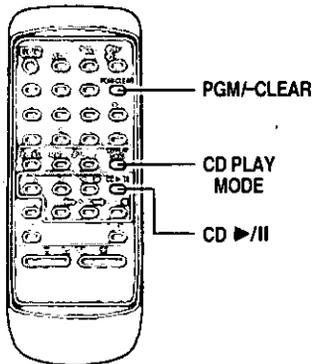
- During random play (\Rightarrow page 13), you cannot skip to tracks which have already been played.
- During program play (\Rightarrow page 14), or random play, you cannot search forward or backward over tracks.
- During program play, skipping is always in the programmed order, whether forward or backward.
- Program play cannot be used in combination with random play.

A CD selection and care

With this system, you can only play CDs having this mark. (a)

Do not;

- use irregularly shaped CDs. (b)
- attach extra labels and stickers.
- use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers. (c)
- attach scratch-proof covers or any other kind of accessory.
- write anything on the CD.
- clean CDs with liquids. (Wipe with a soft, dry cloth.)
- use CDs printed with labels available on the market.

A**B****CDs****A Direct access play**By remote control only

Direct access allows you to start normal play from a specific track to the last track of the CD.

- 1 Press [STOP ■] to select the CD mode.**
Every time you press the button:
TAPE ↔ CD
- 2 Press the numeric button(s) to select the desired track number.**
Play will start with the track you select.

To select a two-digit track

Press [≥10] and then the two numbers you want.

For example

Track no. 20: [≥10]→[2]→[0]

Track no. 35: [≥10]→[3]→[5]

B Repeat play and random playBy remote control only

Press [CD PLAY MODE] before or during play to select the desired play mode.

Every time you press the button:



Press [CD ▶/||] to start play if in the stop mode.

To repeat just one track:

Press [CD PLAY MODE] to select "1- (repeat)".

To repeat all tracks:

Press [CD PLAY MODE] to select "CD (repeat)".

To start random play:

Press [CD PLAY MODE] to select "RANDOM".

All tracks on the loaded CD will be played in random order. Playback will stop automatically when all tracks have been played.

Note

- Random play does not work when "PROGRAM" is displayed (press and hold [PGM/-CLEAR] first).
- Tracks cannot be selected with the numbered buttons.
- You cannot skip to tracks already played.
- Search can be done within the track in play only.

To cancel repeat play and random play

Press [CD PLAY MODE] to clear "1- (repeat)", "CD (repeat)" and "RANDOM".

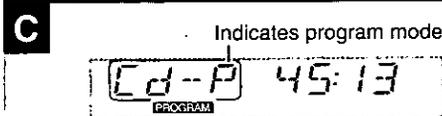
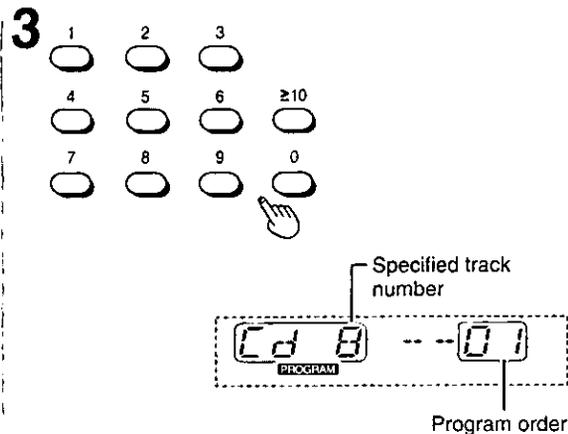
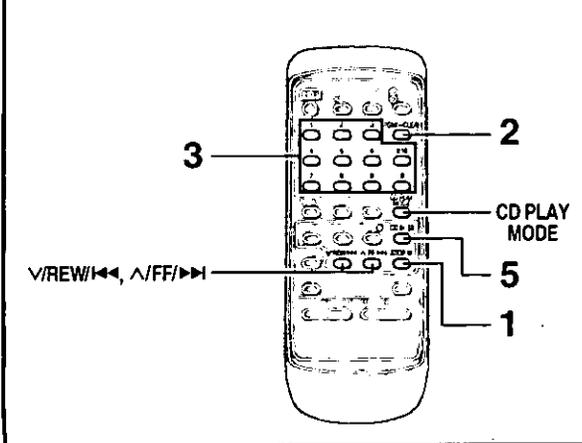
If cancelled during play, play continues to the end of the disc.

Pressing [OPEN/CLOSE ▲] also cancels repeat play and random play.

To repeat programmed tracks

- ① Program desired tracks (steps 1 to 4 on page 14).
- ② Press [CD PLAY MODE] to display "CD (repeat)".
- ③ Press [CD ▶/||] to begin play.

Listening operations



CDs

Program play

By remote control only

This function allows you to program up to 36 tracks.

- 1** Press [STOP ■] to select the CD mode.
- 2** (In the stop mode)
Press [PGM/-CLEAR].
- 3** Press the numeric button(s) to select the track you want to play in the desired sequence.
- 4** Repeat step 3 until you have programmed all the tracks you want.
- 5** Press [CD ►/II].
Play will start in the programmed sequence.
Play will stop automatically when all the programmed tracks have been played.
The program remains intact even if play is stopped or the unit is turned off. "Cd-P" appears when play is stopped to indicate the contents are in the memory.

To cancel program play mode

Press and hold [PGM/-CLEAR] in the stop mode until "CLEAR" is displayed.

The mode is also canceled if the CD tray is opened. This will also erase the entire program.

To select a two-digit track

Press [≥10] and then the two numbers you want.

A When "-- :--" is displayed

Total play time of the programmed tracks equals, or exceeds 100 minutes.

Tracks can still be programmed and played.

B When "FULL" appears

The number of programmed tracks is limited to 36. No further tracks can be programmed.

C Check program contents

Check to see if "Cd-P" is displayed, then press either [V/REW/FF/FF] or [V/FF/FF/FF].

Every time you press one of the buttons, the track and program No. are shown on the display.

Add to the program

In the stop mode, repeat step 3.

Note

Program play does not work when "RANDOM" is displayed (press [CD PLAY MODE] to clear it) (→ page 13). Search can be done within tracks only.

Memory retention

Your program is retained in memory for about 2 weeks while the system is unplugged.

Cassette tapes

- 1 Press [POWER ϕ /I] to turn the unit on.
- 2 Insert the cassette with the exposed tape facing left.
- 3 Press [TAPE \blacktriangleright] to start playback.
- 4 Adjust the volume.

To stop tape playback

Press [■/-DEMO].

To eject tape

Press [■/-DEMO] then press [EJECT \blacktriangle].

One-touch play

When the system is OFF and a cassette is already inserted, play starts automatically when you press [TAPE \blacktriangleright].

Fast-forward and rewind

Press [V/REW/I \blacktriangleleft] (rewind) or [V/FF/ \blacktriangleright] (fast-forward).

Cassette tape selection and care

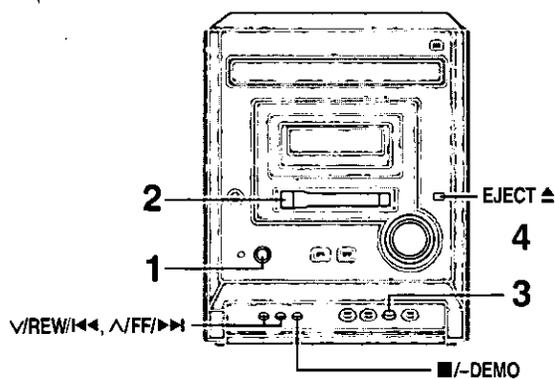
Types of tapes which can be played correctly.

The system automatically identifies the type of tape.

NORMAL POSITION/TYPE I	✓
HIGH POSITION/TYPE II	×
METAL POSITION/TYPE IV	×

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

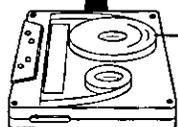
- Tapes exceeding 100 minutes are thin and can break or get caught in the mechanism.
- Tape slack can get caught up in the mechanism and should be wound up before the tape is played.
- Endless tapes can get caught up in the deck's moving parts if used incorrectly.



1 POWER ϕ /I



2



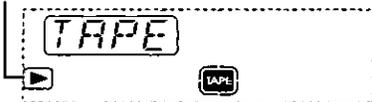
side to be played facing up

3

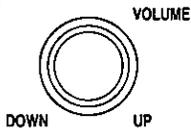


TAPE \blacktriangleright

Tape playing



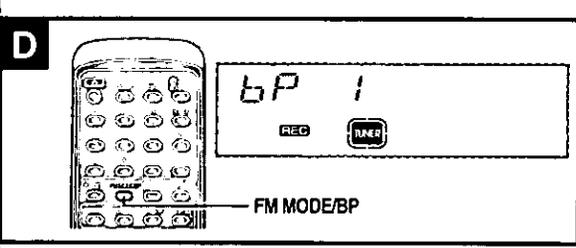
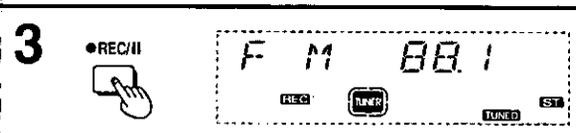
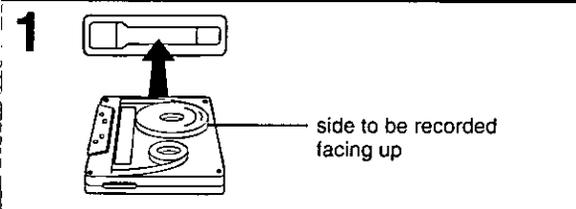
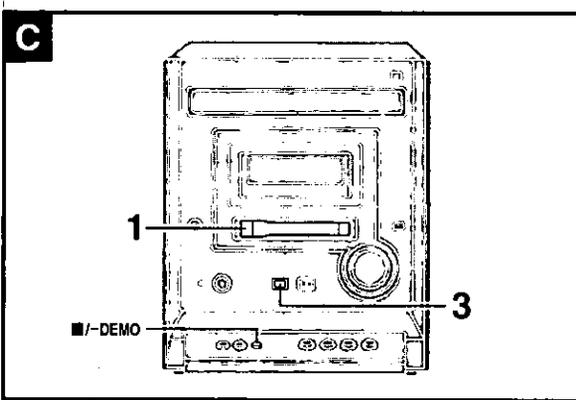
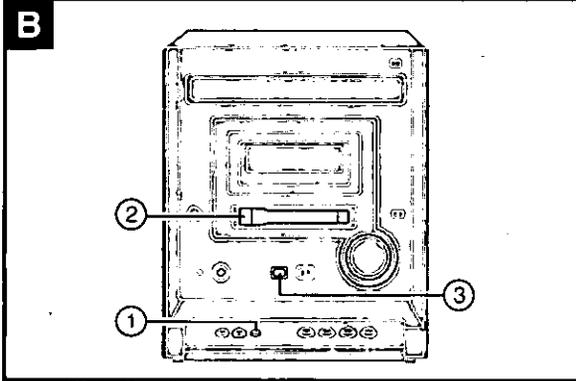
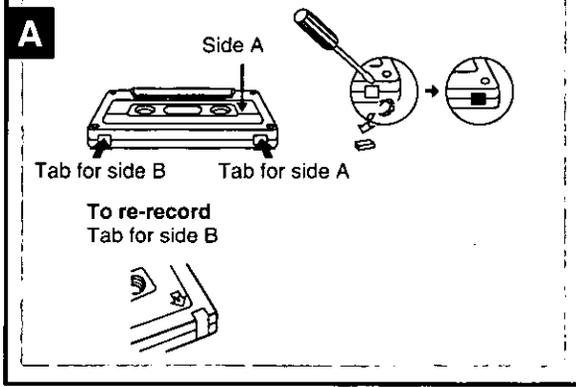
4



VOLUME

DOWN UP





Before recording

Types of tapes which can be recorded correctly

The system automatically identifies the type of tape.

NORMAL POSITION/TYPE I	✓
HIGH POSITION/TYPE II	×
METAL POSITION/TYPE IV	×

High position and metal position tapes can be used, but the unit will not be able to record or erase them correctly.

A Erasure prevention

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

The effect of volume and sound quality on recording.

These have no effect on recording. They can be changed for playback.

B To erase a recorded sound

- ① Press [■/—DEMO] to select TAPE mode.
- ② Insert the cassette with the exposed tape facing left.
- ③ Press [●REC/II].

C Recording from the radio

Preparations:

- Wind on the leader tape.
- To record from halfway through the tape
Wind the tape to the point from where you want to start recording.
- Press [POWER ⏻/I] to turn the unit on.

1 Insert the tape to be recorded on.
Insert with the exposed tape facing left.

2 Tune to the required station.
(→ page 10 or 11)

3 Press [●REC/II] to start recording.

To stop recording

Press [■/—DEMO].

To stop recording temporarily

Press [●REC/II].

To resume recording, press [●REC/II].

D To reduce noise while recording an AM broadcast (Beat proof function)

By remote control only

Press [FM MODE/BP] while recording.

Every time you press the button:

bP 1 ↔ bP 2

Select the position where there is less noise.

Recording CDs

Normal recording

- Tracks are recorded in the order in which they are found on the CD.
- Tracks are cut in the middle when the end of the tape is reached.
- You can record from any point on the tape.

- 1** Insert the cassette with the exposed tape facing left.
- 2** Press [■/DEMO] to select the CD mode.
- 3** Press [OPEN/CLOSE ▲] to open the CD tray. Insert the CD with label facing upward. Press [OPEN/CLOSE ▲] to close the CD tray.
- 4** Press [●REC/II] to start recording. The recording will start from the first track.

To stop recording

Press [■/DEMO].

The recording and the CD will stop.

To stop recording temporarily

Press [●REC/II].

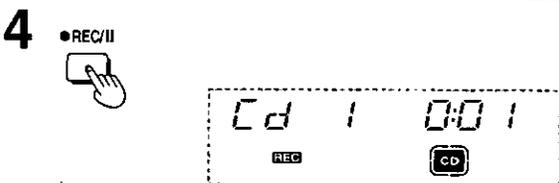
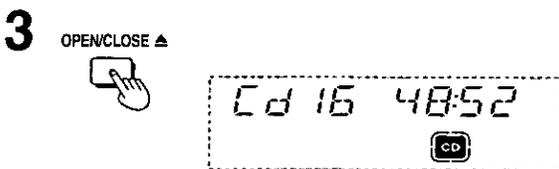
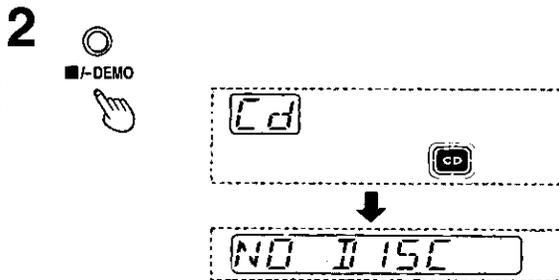
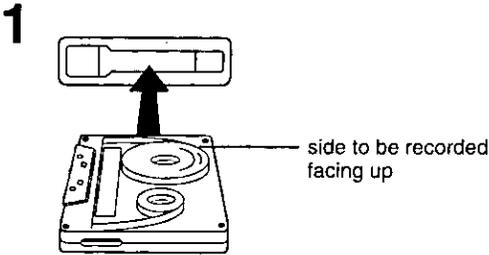
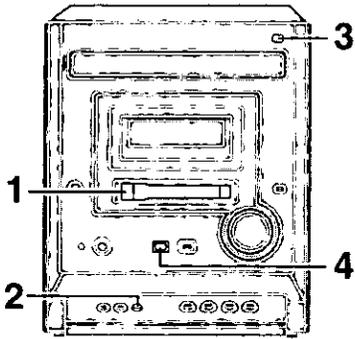
To resume recording, press [●REC/II].

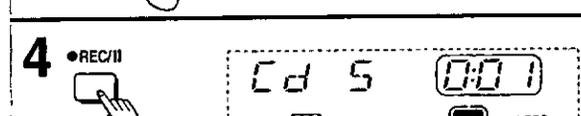
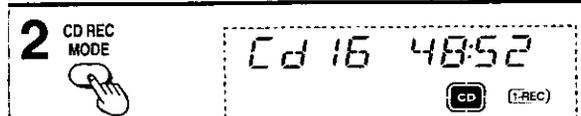
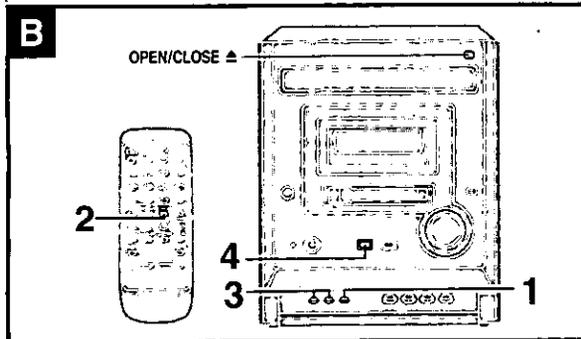
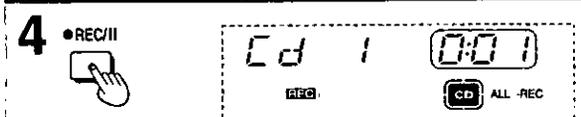
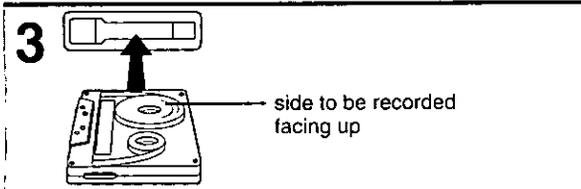
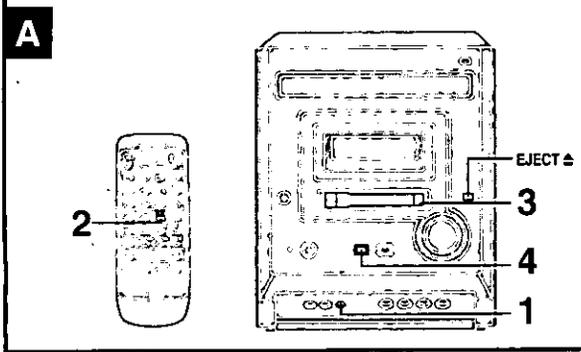
To record from a specific point on a tape

Before recording, advance the tape to the point from where you want to start recording.

To record programmed tracks

- ① After step 3, program the track(s) you want (→ steps 2-4 on page 14).
- ② Press [●REC/II] to start recording.





Recording CDs

You can record the whole CD (ALL-REC) or a selected track (1-REC).

A ALL-REC

It is not necessary to rewind the cassette. Recording always begins from the beginning of the side facing up.

Preparation: Insert a CD (⇒ page 12).

- 1 Press [I-DEMO] to select the CD mode.
- 2 Press [CD REC MODE] on the remote control so "ALL-REC" is displayed.

Every time you press the button:

ALL-REC → 1-REC → OFF

The display shows the length of tape needed.

"C-- -- --" indicates the tape needed exceeds 100 minutes. You can still record, but some tracks may not be recorded if the tape isn't long enough.

- 3 Insert the tape with the exposed tape facing left.

- 4 Press [●REC/II] to start recording. The unit rewinds the tape, records 10 seconds of silence, and then starts recording.

To stop recording

Press [I-DEMO]. The CD also stops.

If a track is interrupted at the end of the side facing up

Recording and CD pauses.

To record the track again on the opposite side

- ① Press [EJECT ▲], flip the cassette, and insert it.

- ② Press [●REC/II].

The unit records 10 second of silence, and resumes recording from the beginning of the cut-off track.

To record selected tracks

- ① Program tracks (⇒ steps 1 to 4 on page 14).
- ② Do steps 2 to 4 above.

Note

You cannot use ALL-REC with repeat or random play. (⇒ page 13).

B 1-REC

Preparations:

Insert a CD (⇒ page 12) and a cassette.

Wind the tape to the point from where you want to start recording.

- 1 Press [I-DEMO] to select the CD mode.
- 2 Press [CD REC MODE] on the remote control so "1-REC" is displayed.
- 3 Press [V/REW/II] or [V/FF/III] to select the track you want to record.
- 4 Press [●REC/II] to start recording. CD plays and recording starts at the same time.

To stop recording

Press [I-DEMO]. The CD also stops.

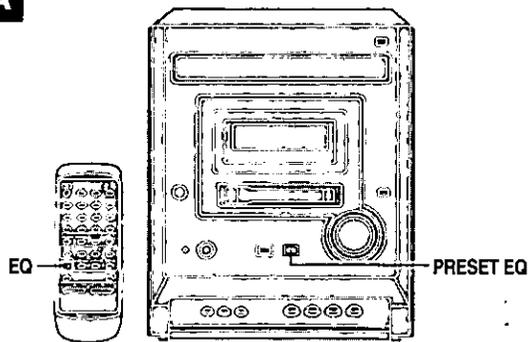
To continue recording from another CD

- ① Press [OPEN/CLOSE ▲] and insert the other CD.
- ② Do steps 3 and 4.

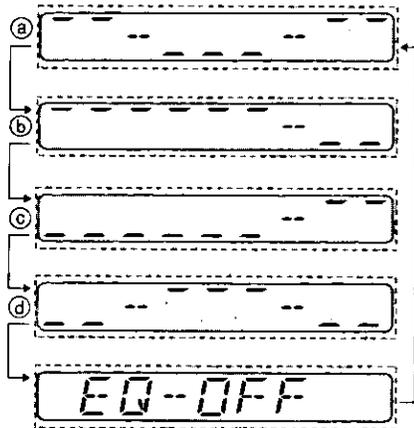
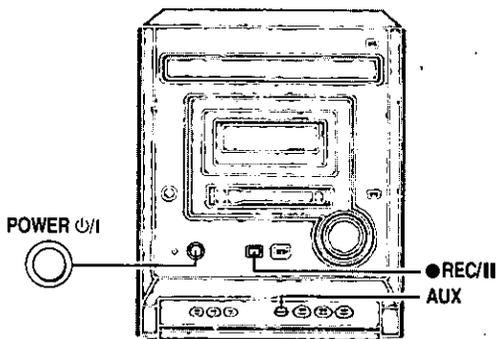
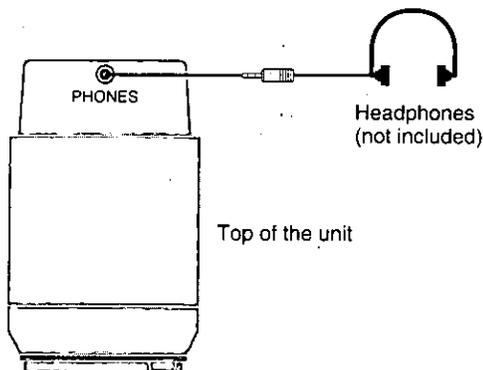
To record a track while it is being played

- ① Press [CD REC MODE] so "1-REC" is displayed.
- ② Press [●REC/II].

Recording starts from the beginning of the track and stops when the track finishes.

A

PRESET EQ

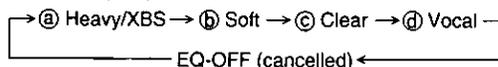
**B****C****A Sound Quality**

You can choose one of four types of sound quality.

- (a) **Heavy/XBS:** Adds punch to rock
- (b) **Soft:** For background music
- (c) **Clear:** Clarifies higher sounds
- (d) **Vocal:** Adds gloss to vocal

Press [PRESET EQ] to select a setting.

Each time you press the button:

**Note**

Changes to sound quality do not affect recordings.

B Using an external unit**Listening to an external source**

(See page 7 for external unit connection.)

- ① Press [POWER 0/I] to turn on the unit.
- ② Press [AUX] to select "AUX".
- ③ Start playback from the external source. (Refer to your equipment's operating instructions.)

Recording from an external source

- ① Insert the tape to be recorded on.
- ② Press [AUX] to select "AUX".
- ③ Press [●REC/II] (recording starts).
- ④ Start playback from the external source. (Refer to your equipment's operating instructions.)

C Listening with headphones

Reduce the volume level, and connect the headphones. Plug type: 3.5 mm stereo.

Note

Avoid listening for prolonged periods of time to prevent hearing damage.

Using the timers

Using the play/record timer

By remote control only

The timer has two functions. It can be set to on at a certain time to wake you up, or it can be set to record from the radio or from the aux source.

The play timer cannot be used in combination with the record timer.

Preparations:

- Turn the unit on and set the clock (⇒ page 9).
- **For the play timer**, prepare the music source you want to listen to; tape, CD, radio or aux, and set the volume.
- **For the record timer**, check the cassette's erasure prevention tabs (⇒ page 16: **A**), insert the tape and tune to the radio station (⇒ page 10) or select the aux source (⇒ page 19: **B**).

1 Press [CLOCK/TIMER] to select the timer function.

Every time you press the button:



ON ⊕ PLAY : to set the play timer

ON ⊕ REC : to set the record timer

Proceed to step 2 before these indicators stop flashing (about 10 seconds).

Setting the start and finish times

2 (Within 8 seconds or so)

① Press [V/REW/◀◀] or [^/FF/▶▶] to select the starting time.

② Press [CLOCK/TIMER].

3 ① Press [V/REW/◀◀] or [^/FF/▶▶] to select the finishing time.

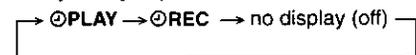
② Press [CLOCK/TIMER].

The start and finish times are now set.

Turning the timer on

4 Press [⊕PLAY/⊕REC].

Every time you press the button:



⊕PLAY : to turn the play timer on

⊕REC : to turn the record timer on

(The indicator doesn't appear if the start and finish times haven't been set.)

"E" appears if the clock hasn't been set.

5 Press [⏻] to turn the unit off.

The unit must be off for the timers to operate.

• For play timer

The timer play will start at the preset time and volume level you preset.

• For record timer

The record timer comes on about 30 seconds earlier than the set time.

To cancel the timer

Press [⊕PLAY/⊕REC] to clear the timer indicators from the display.

The timer comes on at the set time everyday if the timer is on. **To change the settings (when unit is on)**

• To change the play/record times

Do steps 1, 2, 3, and 5.

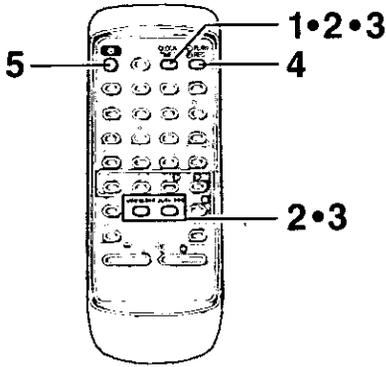
• To change the source or volume

① Press [⊕PLAY/⊕REC] to clear the timer indicator from the display.

② Make changes to the source or volume.

③ Do steps 4 to 5.

(Continued on next page)



1

CLOCK/
TIMER



AM 12:00

PM 12:00

2

① V/REW/◀◀ / ^/FF/▶▶



AM -7:30

PM +30

② CLOCK/
TIMER



AM -7:30 OFF

PM +30 OFF

3

① V/REW/◀◀ / ^/FF/▶▶



AM -8:30 OFF

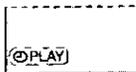
PM -2:30 OFF

② CLOCK/
TIMER



4

⊕PLAY
⊕REC



5



Using the timers

A Using the play/record timer

By remote control only

To check the settings (when unit is off)

Press [CLOCK/TIMER].

The timer conditions are shown in the following order.
start time, finish time → source → volume → clock

You can enjoy other sources after you have set the timer.

Turn the unit off before the timer's start time.

Note

- If you turn the unit off and on again while a timer is functioning, the finish time setting will not be activated.
- If the unit is on, the timer will not function. The unit must be in the standby mode.
- If AUX is selected as the source, when the timer comes on, the system turns on and engages AUX as the source. If you want to playback or record from a connected unit, set the other unit's timer to the same time. (See the other unit's instruction manual.)

B Using the sleep timer

By remote control only

Set the unit to stop and turn off after a certain time.

While enjoying the desired source:

Press [SLEEP] to select the desired time.

Every time you press the button:

SLEEP 30 → SLEEP 60 → SLEEP 90 → SLEEP 120 → SLEEP OFF

To cancel the sleep timer

Press [SLEEP] to select "SLEEP OFF".

To confirm the remaining time

(only while unit is ON)

Press [SLEEP].

The remaining time is shown for about 5 seconds.

To change the time remaining during operation

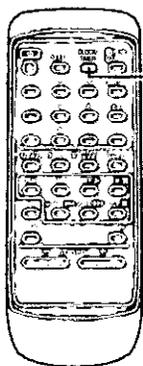
Press [SLEEP] to show the remaining time, and then press [SLEEP] to select the desired time.

Note

The play and sleep timer or the record and sleep timer can be used together.

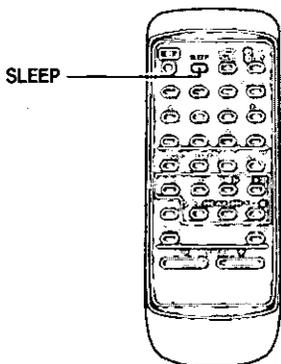
The sleep timer always has priority. Be sure not to overlap timer settings.

A

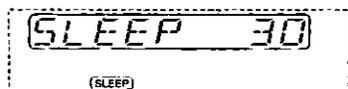


CLOCK/
TIMER

B



SLEEP



Troubleshooting guide

Before requesting service, make the below checks. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem:

In the U.S.A., contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail consumerproducts@panasonic.com, or web site (<http://www.panasonic.com>).

In Canada, contact Panasonic Canada Inc. Customer Care Centre at 905-624-5505, web site (www.panasonic.ca), or an authorized Servicentre closest to you.

Reference pages are shown as black circled numbers ⑤.

Common Problems

<p>No sound.</p>	<p>Turn the volume up. The speaker cords may be shorted. Turn the unit off, check and correct the connections and turn the unit on. ⑥</p>
<p>Sound is unfixed, reversed or comes from one speaker only.</p>	<p>Check the speaker connections. ⑥</p>
<p>Humming heard during play.</p>	<p>An AC power supply cord or fluorescent light is near the cables. Keep other appliances and leads away from this unit's cables.</p>
<p>"E" is displayed.</p>	<p>Incorrect operation performed. Read the instructions and try again.</p>
<p>"AM 12:00" appears on the display.</p>	<p>You plugged the AC power supply cord in for the first time or there was a power failure recently. Set the time. ⑨</p>
<p>"F76" is displayed.</p>	<p>Check and correct the speaker cord connections. ⑥ If this does not fix the problem, there is a power supply problem. Consult the dealer.</p>

Listening to the radio

<p>Noise is heard. The stereo indicator flickers or doesn't light. Sound is distorted.</p>	<p>Use an outdoor antenna. ⑦</p>
<p>A beat sound is heard.</p>	<p>Turn the TV off or separate it from the unit.</p>
<p>A low hum is heard during AM broadcast.</p>	<p>Separate the antenna from other cables and cords.</p>

When there is a television set nearby

<p>The picture on the TV disappears or stripes appear on the screen.</p>	<p>The location and orientation of the antenna are incorrect. If you are using an indoor antenna, change to an outdoor antenna. ⑦ The TV antenna wire is too close to the unit. Separate the antenna wire of the TV set from the unit.</p>
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Using the cassette deck

<p>Poor quality sound.</p>	<p>Clean the heads. ⑫</p>
<p>Recording is not possible.</p>	<p>If the erasure prevention tabs have been removed, cover the holes with adhesive tape. ⑬</p>

Playing discs

<p>The display is wrong or play won't start.</p>	<p>The disc may be upside down. ⑫ Wipe the disc. Replace the disc if it is scratched, warped, or non-standard. Condensation may have formed inside the unit due to a sudden change in temperature. Wait about an hour for it to clear and try again.</p>
<p>Only one track from the CD is recorded.</p>	<p>Press [CD REC MODE] on the remote control to cancel one track edit recording and to select the required mode (ALL-REC or OFF). ⑬</p>

The remote control

<p>Remote control doesn't work.</p>	<p>Check that the batteries are inserted correctly. ⑤ Replace the batteries if they are worn.</p>
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Specifications

AMPLIFIER SECTION

FTC Power output
10% Total harmonic distortion
20 Hz–20 kHz, both channels driven
7.5W per channel (6 Ω)

RMS Power output
10% Total harmonic distortion
1 kHz, both channels driven
7.5W per channel (6 Ω)

Input sensitivity
AUX 250 mV
Input impedance
AUX 23 kΩ
Output impedance
Headphone 16–32 Ω

FM TUNER SECTION

Frequency range 87.9–107.9 MHz (200 kHz steps)
87.5–108.0 MHz (100 kHz steps)
Sensitivity 1.8 μV (IHF)
S/N 26 dB 1.5 μV
Antenna terminal(s) 75Ω (unbalanced)

AM TUNER SECTION

Frequency range 520 – 1710 kHz (10 kHz steps)
Sensitivity
S/N 20 dB (at 999 kHz) 500 μV/m

CASSETTE DECK SECTION

Track system 4 track, 2 channel
Heads
Record/playback Solid permalloy head
Erasure AC erase head
Motor DC servo motor
Recording system AC bias 100 kHz
Erasing system AC erase 100 kHz
Tape speed 4.8 cm/s
Overall frequency response
(+3 to -6 dB at DECK OUT)
NORMAL (TYPE I) 50 Hz – 13 kHz
S/N 52 dB (A weighted)
Wow and flutter 0.15% (WRMS)
Fast forward and rewind time
Approx. 120 seconds with C-60 cassette tape

CD SECTION

Sampling frequency 44.1 kHz
Decoding 16 bit linear
Beam source/wavelength Semiconductor laser/780 nm
Number of channels Stereo
Wow and flutter Below measurable limit
Digital filter 8 fs
D/A converter MASH (1 bit DAC)

SPEAKER SECTION

Type 1 way speaker system
Speaker(s)
Full range 8 cm (3¹/₈") cone type
Impedance 6 Ω
Input power 35 W (Music)
Output sound pressure level 82 dB/W (1.0 m)
Frequency range 53 Hz–25 kHz (–16 dB)
61 Hz – 22 kHz (–10 dB)
Dimensions (WxHxD) 128 x 195 x 213 mm
(5¹/₃₂" x 7¹¹/₁₆" x 8³/₈")
Mass 1.7 kg (3.7 lb.)

GENERAL

Power supply AC 120 V, 60 Hz
Power consumption 27 W
Standby 0.4 W
Dimensions (WxHxD) 160 x 195 x 320 mm
(6⁵/₁₆" x 7¹¹/₁₆" x 12⁵/₈")
Mass 3.6 kg (7.9 lb.)

Note:

- Specifications are subject to change without notice.
Mass and dimensions are approximate.
- 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

Clean the heads regularly to assure good quality playback and recording.

Use a cleaning tape (not included).

Product Service

- 1. Damage requiring service**—The unit should be serviced by qualified service personnel if:
 - (a) The AC power supply cord or AC adaptor has been damaged; or
 - (b) Objects or liquids have gotten into the unit; or
 - (c) The unit has been exposed to rain; or
 - (d) The unit does not operate normally or exhibits a marked change in performance; or
 - (e) The unit has been dropped or the cabinet damaged.
- 2. Servicing**—Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- 3. Replacement parts**—When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- 4. Safety check**—After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

Product information

For product information or assistance with product operation:

In the U.S.A., contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail consumerproducts@panasonic.com, or web site (<http://www.panasonic.com>).

In Canada, contact Panasonic Canada Inc. Customer Care Centre at 905-624-5505, web site (www.panasonic.ca), or an authorized Servicentre closest to you.



As an ENERGY STAR® Partner, Panasonic has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

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