

Panasonic®



Operating Instructions Portable Stereo CD System

Model No. **RX-D45**

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.

Supplied accessories

Please check and identify the supplied accessories.

1 x AC mains lead



COMPACT
disc
DIGITAL AUDIO

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

Your unit may not look exactly the same as illustrated.

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.

CAUTION!

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

The socket outlet shall be installed near the equipment and easily accessible. The mains plug of the power supply cord shall remain readily operable. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from AC receptacle.

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.

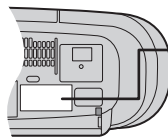
THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

–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.



CLASS 1
LASER PRODUCT

CAUTION	- CLASS 1M INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1 +A2/ Class 1M
VARNING	- KLASS 1M OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN DIREKT GENOM OPTISKA INSTRUMENT.
FORSIGTIG	- OSYNLIG LASERSTRÅLNING KLASSE 1M. NÄR LÅSET ER ÅBENT. UNDGÅ AT SE UDEN OPTISKE INSTRUMENTER.
VARO!	- AVATTENESSA OLET ALTIMIÄN LUOKAN 1M NÄRVÄYMÄNTÄ LASERSATELIÄ. ÄLÄ KATSO OPTISELLÄ LAITTEELLA SUORAAN SÄTEESEEN.
VORSICHT	- UNSICHTBARE LASERSTRÄHLUNG KLASSE 1M. WENN ABECKUNG GEÖFFNET. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.
ATTENTION	- RAYONNEMENT LASER INVISIBLE. CLASSE 1M. EN CAS D'OUVERTURE. NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D'OPTIQUE.
PRECAUCION	- RADIACIÓN LASER INVISIBLE DE CLASE 1M AL ESTAR ABIERTO. NO VEA DIRECTAMENTE CON INSTRUMENTOS ÓPTICOS.
注意	- ここを開くと不可視レーザー光が出ます。 ビームを視たり、触れたりしないでください。
注意	- 打开時不可見激光辐射。避免光束照射。 G87249-1-200108-02 ROLXS0105

Inside of product

Maintenance

If the surfaces are dirty

To clean this unit, wipe with a soft, dry cloth.

If the surfaces are extremely dirty, use a soft cloth dipped in a soap-and water solution or a weak detergent solution.

- 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.

Care of tape deck's heads

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

Table of contents

Maintenance.....	2
Safety precautions	3
Use of batteries.....	3
Power sources	3
Overview of controls	4
Discs	4
Using the FM/AM radio.....	5
Cassette tape – Play and record	5
Using the clock and timers	6
Using sound effects	6
Troubleshooting guide	6
Specifications	7

Safety precautions

- Avoid using or placing this unit near sources of heat. Do not leave it in an automobile exposed to direct sunlight for a long time with the doors and windows closed as this may deform the cabinet.
- Avoid cuts, scratches, or poor connections in the AC mains lead, as they may result in possible fire or electric shock hazard. Also, excessive bending, pulling or splicing of the lead should be avoided.
- Do not unplug the AC mains lead by pulling on the lead. To do so may cause premature failure or shock hazard.
- Do not operate this unit in a bathroom, as a potential shock hazard may result.
- When not in use, disconnect the AC mains lead from the household mains socket.

Use of batteries

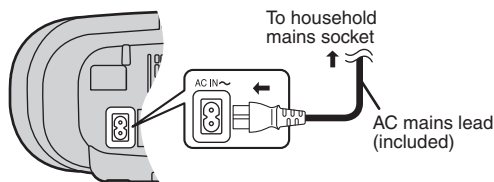
- **If this unit is not used for a long period of time or is used only from an AC power source, remove all the batteries to prevent potential damage due to possible battery leakage.**
- Do not mix old and new batteries.
- Do not use different types of batteries at the same time.
- Do not take apart or 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 can cause electrolyte leakage, which may cause a fire.

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.

Power sources

Using the household mains socket

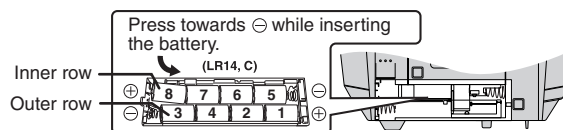


Connect the AC mains lead firmly to the unit and the household mains socket.

Note

- The included AC mains lead is for use with this unit only. Do not use it with other equipment.
- The unit is in the standby condition when the AC power supply cord is connected. The primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

Using batteries (not included)



- The unit cannot be powered by batteries if the AC mains lead is connected. Disconnect the AC mains lead from the unit to operate on battery power.
- Use only alkaline batteries.

When to change the batteries

When the battery indicator begins flashing, replace all 8 of the batteries. It is also a good idea to replace all the batteries before recording.



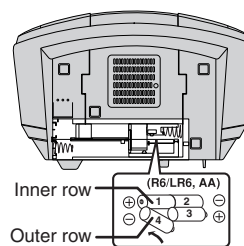
Note

Before any function starts, the battery indicator may flash although the batteries are not drained. The indicator will display its current status when the unit is powered from the household mains socket by using the AC mains lead.

Memory back-up

When the power supply is interrupted, the current time, timer settings and radio stations you have set are saved if you have inserted back-up batteries (not included).

These batteries do not power the unit.



When to change the batteries

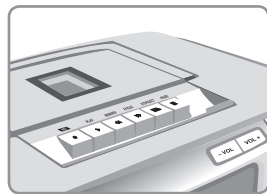
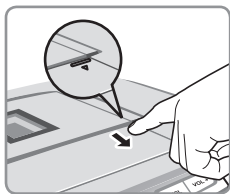
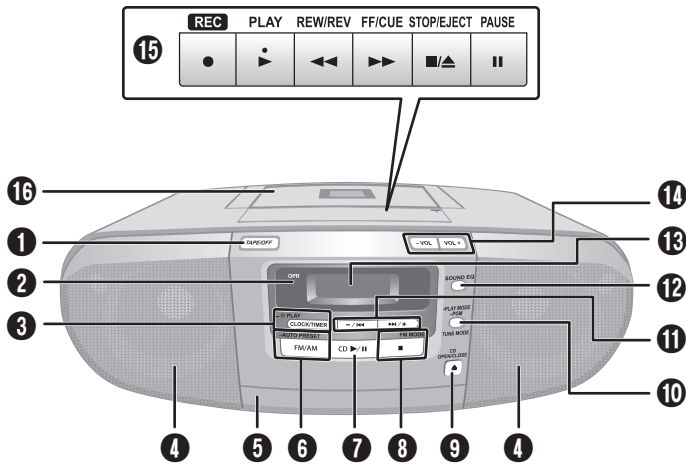
The batteries last about a year.

Connect the unit to AC power before replacing the batteries. Before connecting or disconnecting the AC mains lead, press [■/▲, STOP/EJECT] to stop the tape and press [TAPE/OFF] to turn the unit off. The back-up batteries wear out faster if the cord is disconnected with the power still on.

Note

Use either alkaline or manganese batteries.

Overview of controls

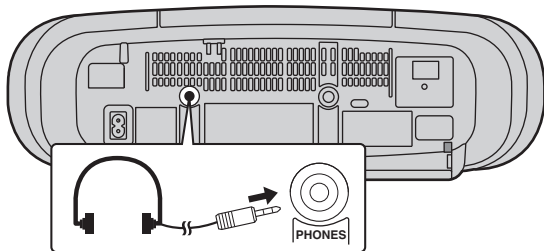


- 1 **Tape mode/standby switch**
Unit will be in standby mode.
- 2 **OPR (operation) indicator**
The indicator lights up when the unit is turned on.
- 3 **Clock or timer setting, play timer setting**
- 4 **Speakers**
These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.
- 5 **Disc tray**
- 6 **Tuner (FM/AM) selection, auto preset selection**
- 7 **Disc play or pause**
- 8 **Stop disc playback, MONO selection for FM mode**
- 9 **Disc tray open or close**
- 10 **Play mode function, program function, tuning mode selection**
- 11 **Track skip or search, check program content, preset channel selection, tuning function, time adjustment**
- 12 **Sound equalizer (EQ) selection**
- 13 **Display panel**
- 14 **Volume control**
- 15 **Cassette play operations**
- 16 **Cassette deck**

Headphone jack (PHONES)

Plug type: Ø 3.5 mm stereo (not included)

- Avoid listening for prolonged periods of time to prevent hearing damage.
- Excessive sound pressure from earphones and headphones can cause hearing loss.



Discs

Basic play

- 1 Press [▲, CD OPEN/CLOSE] to open the disc tray and then load the disc with the label facing up.
- 2 Press [▲, CD OPEN/CLOSE] again to close.
- 3 Press [▶/||, CD] to start play.

Stop playback	Press [■] (stop) during play.
Pause play	Press [▶/ , CD] during play. Press again to resume play.
Skip tracks	Press [-/◀◀] or [▶▶/+] . During RANDOM play, you cannot skip to tracks that have been played.
Search through tracks	Press and hold [-/◀◀] or [▶▶/+] during play or pause. • During program play (➡ see below), or random play (➡ see below, "Play Mode function"), you can search only within the track.

Play Mode function

Press [-PLAY MODE] repeatedly to select the desired mode.

1-TRACK REPEAT 1-↻	Play one selected track repeatedly on the disc. Press [-/◀◀] or [▶▶/+] to select the track.
REPEAT ↻	Repeat play a disc or programmed tracks (➡ see below).
RANDOM RND	Play a disc randomly.

Note

During "Program play", "Play Mode function" cannot be activated.

Program play

This function allows you to program up to 24 tracks.

- 1 Press [▶/||, CD] and then [■] (stop).
- 2 Press and hold [-PGM].
"PGM" is displayed.
- 3 Press [-/◀◀] or [▶▶/+] to select your desired track.
- 4 Press [-PGM].
Repeat steps 3 and 4 to program other tracks.
- 5 Press [▶/||, CD] to start play.

Cancel program mode	Press and hold [-PGM] in the stop mode.
Replay the program	Press and hold [-PGM] then [▶/ , CD] in the stop mode.
Check program contents	Press [-/◀◀] or [▶▶/+] when "PGM" is displayed in the stop mode.
Clear all programmed tracks	Press and hold [■] (stop) in the stop mode. "CLEAR" is displayed.

Note

- When you try to program more than 24 tracks, "FULL" appears.
- You will not be able to add more tracks to the existing program. The existing program has to be cleared.
- 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

Choose discs with this mark:



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

Using the FM/AM radio

Manual tuning

- 1 Press [FM/AM] to select "FM" or "AM".
- 2 If "PGM" is displayed, press [TUNE MODE] to clear it.
- 3 Press [-/◀◀] or [▶▶/+] to select the frequency of the required station.

To tune automatically

Press and hold [-/◀◀] or [▶▶/+] 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 [-/◀◀] or [▶▶/+] once again.

To improve reception

FM: Extend the whip antenna and adjust its direction.
AM: Adjust the position of the unit.

To improve FM sound quality

When "FM" is selected

Press [FM MODE] to display "MONO".

To cancel

Press [FM MODE] again.

- MONO is also cancelled if the frequency is changed.
- Turn off "MONO" for normal listening.

Memory preset

Up to 16 stations each can be set in the FM and AM bands.

◆ Preparation

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

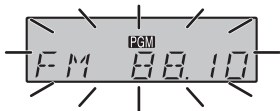
Automatic presetting

Press and hold [-AUTO PRESET] to start presetting.

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

Manual presetting

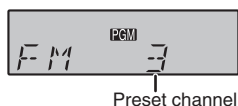
- 1 If "PGM" is displayed, press [TUNE MODE] to clear it.
- 2 Press [-/◀◀] or [▶▶/+] to select the frequency of the required station.
- 3 Press and hold [-PGM].
"PGM" and the selected frequency blinks.



- 4 Within 10 seconds or so
Press [-PGM] followed by [-/◀◀] or [▶▶/+] to select the desired channel.
- 5 Press [-PGM].
The station occupying a channel is erased if another station is preset to that channel.
- 6 Repeat steps 2 to 5 to preset more stations.

Selecting a preset station

- 1 Press [TUNE MODE].
"PGM" is displayed.
- 2 Press [-/◀◀] or [▶▶/+] to select the channel.



AM allocation setting

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

To change the step from 9 kHz to 10 kHz

- 1 Press and hold [■] (stop).
After a few seconds the display changes to a flashing display of the current minimum frequency.
- 2 Continue to hold down [■] (stop).
 - When the minimum frequency changes, release the button. To return to the original step, repeat the above steps.
 - After the setting is changed, any previously preset frequency will be cleared.

Cassette tape – Play and record

Basic play

Use normal position tapes.

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

- 1 Press [TAPE/OFF].
- 2 Open the cassette operation buttons' lid.
- 3 Press [■/▲, STOP/EJECT] and insert the cassette.
Insert with the side to be played facing up and the exposed tape facing towards you. Close the deck by hand.
- 4 Press [▶, PLAY] to start play.

Stop tape playback	Press [■/▲, STOP/EJECT].
Pause play	Press [⏸, PAUSE]. Press again to resume play.
Fast-forward and rewind	Press [◀◀, REW/REV] or [▶▶, FF/CUE] in the stop mode.
Search for a specific point	Press [◀◀, REW/REV] (to search backward) or [▶▶, FF/CUE] (to search forward) during playback. Play is resumed when the button is released.

Recording

Use normal position tapes.

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

◆ Preparation

Wind up the source tape so recording can begin immediately.

- 1 Press [■/▲, STOP/EJECT] and insert the cassette to be recorded.
Insert with the side to be recorded facing up and the exposed tape facing towards you.
- 2 Select the source to be recorded.

Radio	Tune in the station (⇒ see left).
Disc	<ol style="list-style-type: none"> 1. Insert the disc you want to record. Press [▶/II, CD] and then [■] (stop). 2. Prepare the desired disc recording mode. Record programmed tracks Program the tracks you want (⇒ page 4). Record specific tracks Press [-PLAY MODE] to select the desired mode (⇒ page 4).

- 3 Press [● REC] to start recording.

Stop recording	Press [■/▲, STOP/EJECT].
Record on the other side of the tape	Turn the cassette over and press [● REC].
Erase a recorded sound	<ol style="list-style-type: none"> 1. Press [TAPE/OFF]. 2. Insert the recorded cassette. 3. Press [● REC].

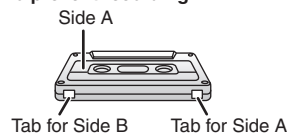
◆ Note

Changes to volume and sound quality do not affect recording.

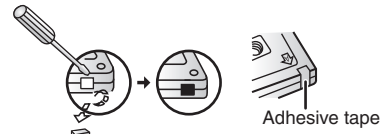
Erasure prevention

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

To prevent recording



To re-record



◆ Note

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

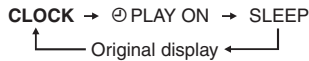
Using the clock and timers

Setting the clock

This is a 24-hour clock.

1 Press [CLOCK/TIMER].

Each time you press the button:



2 Within 5 seconds or so

Press [-/|<<] or [>>|/+] to set the time.

Holding down the button will speed up the time selection.

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

Displaying the clock

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

Note

- Reset the clock regularly to maintain accuracy.
- When the unit is in standby mode and it is powered by batteries, clock will not be displayed.

Using the play timer

You can set the timer to come on at a certain time to wake you up.

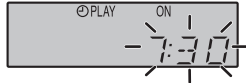
Preparation

- Turn the unit on and set the clock.
- Prepare the music source you want to listen to; disc or radio source, and set the volume.

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

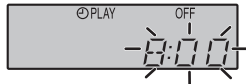
2 Within 5 seconds or so

Press [-/|<<] or [>>|/+] to set the starting time.



3 Press [CLOCK/TIMER] to confirm.

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



To activate the timer

5 Press and hold [-⊖ PLAY] to turn on the timer.

⊖ PLAY ↔ No display (off)

6 Press [TAPE/OFF] to turn off the unit.

Change the settings	Repeat steps 1 to 4 and 6 (→ see above).
Change the source or volume	1. Press and hold [-⊖ PLAY] to clear the timer indicator from the display. 2. Make changes to the source or volume. 3. Perform steps 5 and 6 (→ see above).
Check the settings (when the unit is on or in standby mode)	Press [CLOCK/TIMER] repeatedly to select ⊖ PLAY.
Cancel	Press and hold [-⊖ PLAY] to clear the timer indicator from the display.

Note

- The play timer will start at the preset time, with the volume increasing gradually to the preset level.
- The timer comes on at the set time every day if the timer is on.
- The unit must be in the standby mode for the timer to function.
- If you turn the unit off and on again while a timer is functioning, the finish time setting will not be activated.

Using the sleep timer

This function enables you to turn off the unit automatically after the set time except in tape mode.

1 Press [CLOCK/TIMER] repeatedly to select "SLEEP".

2 Press [-/|<<] or [>>|/+] to select your desired time (in minutes).

To cancel

Press [CLOCK/TIMER] repeatedly to show the remaining time, and press [-/|<<] or [>>|/+] to select "OFF".

Changing the remaining time

Press [CLOCK/TIMER] repeatedly to show the remaining time, and press [-/|<<] or [>>|/+] to select your desired time.

Note

- The play and sleep timer can be used together.
- The sleep timer always has priority. Be sure not to overlap timer settings.

Using sound effects

Changing the sound quality: Sound EQ

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

EQ1 (HEAVY)	EQ1 - - - -	Adds punch to rock
EQ2 (CLEAR)	EQ2 - - - -	Clarifies higher frequencies
EQ3 (SOFT)	EQ3 - - - -	For background music
EQ4 (VOCAL)	EQ4 - - - -	Adds gloss to vocal
EQ OFF	EQ OFF	Cancels the EQ selection

Troubleshooting guide

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

Common problems

Page

Distorted sound or no sound. • Turn the volume up.	—
A "humming" sound can be heard during play. • An AC mains lead or fluorescent light is near the unit. Keep other appliances and cords away from the unit.	—
Clock display is not shown when the unit is powered by batteries and is in standby mode. • Connect to the household AC power in order to view the display.	3
"UO1" is displayed. • Replace the batteries or use household AC power.	—
"F76" is displayed. • There is a power supply problem. Consult the dealer.	—

Discs

"ERROR" • Incorrect operation performed. Read the instructions and try again.	—
"NOPLAY" • Incorrect disc format. Insert the correct disc.	—
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.	—

Cassette tape

Poor sound quality. • Clean the heads.	2
Recording cannot be performed. • If the erasure prevention tabs have been removed, cover the holes with adhesive tape.	5
The cassette cannot be ejected or the deck cannot be closed when loading a cassette. • The batteries are flat. Replace the batteries or connect to household AC power. • Press [▶, PLAY] then [■/▲, STOP/EJECT].	—

Radio

Distorted sound or noise is heard. • Use an outdoor antenna.	—
A beat sound is heard. • Turn the television off or move it away from the unit.	—
A low hum is heard during AM broadcast. • Separate the antenna from other cables and cords.	—

Specifications

AMPLIFIER SECTION

Output power	2.5 W x 2 (RMS MAX / DC)
PMPO output power	60 W

FM/AM TUNER, TERMINALS SECTION

Frequency Modulation (FM)	
Frequency range	87.50 MHz to 108.00 MHz (50 kHz step)
Amplitude Modulation (AM)	
Frequency range	522 kHz to 1629 kHz (9 kHz step) 520 kHz to 1630 kHz (10 kHz step)
Headphone jack	
Terminal	Stereo, 3.5 mm jack (32 Ω)

DISC SECTION

Disc played (8 cm or 12 cm)	CD-Audio (CD-DA), CD-R/W (CD-DA)
Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source	Semiconductor laser (wavelength 795 nm (CD))
Frequency response	40 Hz to 20 kHz
Number of channels	2 channel, stereo
Wow and flutter	Less than possible measurement data

CASSETTE DECK SECTION

Track system	4 track, 2 channel, stereo
Monitor system	Variable sound monitor
Recording system	AC bias 84 kHz
Erase system	Multi Pole magnet
Overall frequency response	50 Hz to 12 kHz
NORMAL	

SPEAKER SECTION

Speakers	Impedance 8 Ω
Full range	2 x 8 cm

GENERAL

Power supply	
AC	230 V to 240 V, 50 Hz
Battery	12 V (8 x LR14, C)
Memory back-up	6 V (4 x R6/LR6, AA)
Power consumption	13 W
Battery life (use only alkaline batteries)	
Radio broadcast	10 hours
Radio recording	10 hours
CD playback	7 hours
CD recording	9 hours
Tape playback	9 hours
Dimensions (WxHxD)	408 mm x 148 mm x 271 mm
Mass	3.2 kg without batteries (3.8 kg with batteries)
Operating temperature range	0°C to +40°C
Operating humidity range	35% to 80% (no condensation)

Power consumption in standby mode:	2 W (approximate)
---	--------------------------

Note

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

