

Pioneer

CD TUNER DECK

XC-IS22CD

STEREO POWER AMPLIFIER

M-IS22

SPEAKER SYSTEM

S-IS22

Operating Instructions

WARNING: THE APPARATUS IS NOT WATERPROOF, TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE AND DO NOT PUT ANY WATER SOURCE NEAR THIS APPARATUS, SUCH AS VASE, FLOWER POT, COSMETICS CONTAINER AND MEDICINE BOTTLE ETC.

H001AEn

WARNING: BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY. THE VOLTAGE OF THE AVAILABLE POWER SUPPLY DIFFERS ACCORDING TO COUNTRY OR REGION, BE SURE THAT THE POWER SUPPLY VOLTAGE OF THE AREA WHERE THIS UNIT WILL BE USED MEETS THE REQUIRED VOLTAGE (E.G., 230V OR 120V) WRITTEN ON THE REAR PANEL.

H041 En

IMPORTANT



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.

CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

CAUTION:

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



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.

H002_En

CAUTION:

THE STANDBY/ON BUTTON IS SECONDARY CONNECTED AND THEREFORE DOES NOT SEPARATE THE UNIT FROM MAINS POWER IN STANDBY POSITION. THEREFORE INSTALL THE UNIT SUITABLE PLACES EASY TO DISCONNECT THE MAINS PLUG IN CASE OF THE ACCIDENT. THE MAINS PLUG OF UNIT SHOULD BE UNPLUGGED FROM THE WALL SOCKET WHEN LEFT UNUSED FOR A LONG PERIOD OF TIME.

H017BEn

This product complies with the Low Voltage Directive (73/23/EEC, amended by 93/68/EEC), EMC Directives (89/336/EEC, amended by 92/31/EEC and 93/68/EEC).

H015AEn

WARNING: THIS PRODUCT EQUIPPED WITH A THREE-WIRE GROUNDING (EARTHLING) TYPE PLUG, A PLUG HAVING A THIRD (GROUNDING, EARTHLING) PIN, IT WILL ONLY FIT INTO A GROUNDING (EARTHLING) TYPE POWER OUTLET. THIS IS A SAFETY FEATURE. IF YOU ARE UNABLE TO INSERT THE PLUG INTO THE OUTLET, CONTACT YOUR ELECTRICIAN TO REPLACE YOUR OBSOLETE OUTLET. DO NOT DEFEAT THE SAFETY PURPOSE OF THE GROUNDING (EARTHLING) TYPE PLUG.

H043 En

WARNING: NO NAKED FLAME SOURCES, SUCH AS LIGHTED CANDLE, SHOULD BE PLACED ON THE APPARATUS. IF NAKED FLAME SOURCES ACCIDENTALLY FALL DOWN, FIRE SPREAD OVER THE APPARATUS THEN MAY CAUSE FIRE.

H044 En

Operating Environment

H045 En

Operating environment temperature and humidity:

+5°C – +35°C (+41°F – +95°F); less than 85%RH (cooling vents not blocked)

Do not install in the following locations

- Location exposed to direct sunlight or strong artificial light
- Location exposed to high humidity, or poorly ventilated location

CAUTION

This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.

Refer all servicing to qualified personnel.

The following caution label appears on your unit.

Location: rear of the unit



H018A_En

CAUTION: The POWER switch does not completely separates the unit from the MAINS in off position, therefore install the unit suitable places easy to disconnect the MAINS plug in case of the accident. The MAINS plug of unit should be unplugged from the wall socket when left unused for a long period of time.

H046 En

VENTILATION: When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 30 cm at top, 15 cm at rear, and 15 cm at each side).

WARNING: Slot and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, to prevent fire hazard, the openings should never be blocked and covered with items, such as newspapers, table-cloths, curtains, etc. Also do not put the apparatus on the thick carpet, bed, sofa, or fabric having a thick pile.

H040 En

IMPORTANT

FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accordance with the following code :

Blue : Neutral
Brown : Live

If the plug provided is unsuitable for your socket outlets, the plug must be cut off and a suitable plug fitted.

The cut-off plug should be disposed of and must not be inserted into any 13 amp socket as this can result in electric shock. The plug or adaptor or the distribution panel should be provided with 5 A fuse. As the colours of the wires in the mains lead of this appliance may not correspond with coloured markings identifying the terminals in your plug, proceed as follows :

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Do not connect either wire to the earth terminal of a three pin plug.

NOTE

After replacing or changing a fuse, the fuse cover in the plug must be replaced with a fuse cover which corresponds to the colour of the insert in the base of the plug or the word that is embossed on the base of the plug, and the appliance must not be used without a fuse cover. If lost replacement fuse covers can be obtained from: your dealer.

Only 5 A fuses approved by B.S.I. or A.S.T.A to B.S. 1362 should be used.

H005BEn

Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However the method of connecting and operating the unit is the same.

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1 Before you start

Checking what's in the box

Thank you for buying this Pioneer product. Before starting to set up your new stereo system, please check that you received the following supplied accessories:

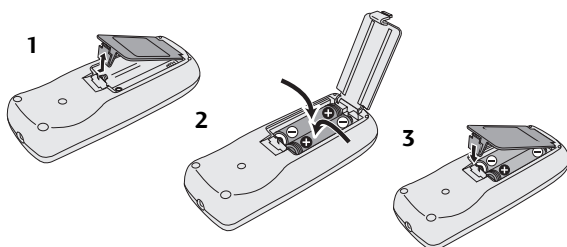
- These operating instructions
- Remote control unit
- Power cord
- System cable
- RCA pin-plug stereo cable
- 2 Speaker cords
- FM antenna
- AM loop antenna
- 2 AA/R6P dry cell batteries

Using this manual

This manual is for the XC-IS22CD Stereo CD Tuner Deck. It is split into three sections: setting up (chapters 1 and 2); using the system (chapters 3 to 9), and additional information (chapter 10). This last chapter contains care information for the unit, discs and tapes, a troubleshooting section, and specifications.

Putting the batteries in the remote

- 1 **Open the battery compartment cover on the back of the remote control unit.**
- 2 **Load the two AA/R6P batteries into the battery compartment following the indications (+, -) inside the compartment.**
- 3 **Close the cover of the battery case.**



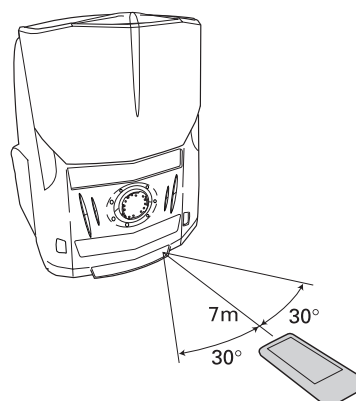
Caution!

- Remove the batteries if the remote is not going to be used for a month or more.
- Remove dead batteries promptly—they can leak and damage the unit.
- When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area.

Using the remote control

Keep in mind the following when using the remote control unit:

- Make sure that there are no obstacles in between the remote and the remote sensor on the unit.
- Use within the operating range and angle, as shown in the diagram at right.
- Remote operation may become unreliable if strong sunlight or fluorescent light is shining on the unit's remote sensor.
- Remote controllers for different devices can interfere with each other. Avoid using remotes for other equipment located nearby this unit.
- Replace the batteries when you notice a fall off in the operating range of the remote.



Finding a suitable location

We want you to enjoy using your new stereo system for years to come, so please bear in mind the following points when choosing a suitable location for the system components and speakers:

Do...

- ✓ Use in a well-ventilated room.
- ✓ Place on a solid, flat, level surface, such as a table, shelf or stereo rack.

Don't...

- ✗ Use in a place exposed to high temperatures or humidity, including near radiators and other heat-generating appliances.
- ✗ Place on a window sill or other place where any of the components or speakers will be exposed to direct sunlight.
- ✗ Use in an excessively dusty or damp environment.
- ✗ Place directly on top of any appliance which becomes hot in use.
- ✗ Use near a television or monitor as you may experience interference—especially if the television uses an indoor antenna.
- ✗ Use in a kitchen or other room where the unit may be exposed to smoke or steam.
- ✗ Place on an unstable surface, or one that is not large enough to support all four of the unit's feet, or the whole footprint of each speaker.
- ✗ Block the cooling fan on the rear of the unit. Don't cover the unit with cloth, or use on thick carpet, etc.
- ✗ Put objects on top of the speakers.

Avoiding condensation problems

Condensation may form inside the unit if it is brought into a warm room from outside, or if the temperature of the room rises quickly. Although the condensation won't damage the unit, it may temporarily impair its performance. For this reason you should leave it to adjust to the warmer temperature for about an hour before switching on and using.

Moving the system unit

If you need to move the system unit, first switch it off and unplug from the wall outlet. Never lift or move the unit during playback—discs rotate at a high speed and may be damaged.

Discs compatible with this system

Any disc with the following logo should play in this system.



Other formats, including CD-RW, DVD, CD-ROM, VIDEO CD, SACD and Photo CD will not play.

This unit can play CD-R discs recorded with audio. However, depending on the quality of the initial recording, and the condition of the disc, you may find that not all discs will play successfully. (For example, if the disc is scratched or dirty, or if the player's pickup lens is dirty.) Some CD-R discs may need to be finalized* before playing successfully.

* *Check the CD recorder's instruction manual for how to finalize a CD-R disc.*

2 Connecting up

The rear panel

The illustration on this page shows the XC-IS22CD.

Main unit

- 1 Right speaker
- 2 Power amplifier
- 3 CD tuner deck
- 4 Left speaker
- 5 Line 1 IN/OUT jacks
- 6 Optional cassette deck connection (CT-IS21)

Accessories

- 7 AM antenna
- 8 RCA pin-plug stereo cable
- 9 FM antenna
- 10 System cable
- 11 Speaker cords
- 12 AC power cord

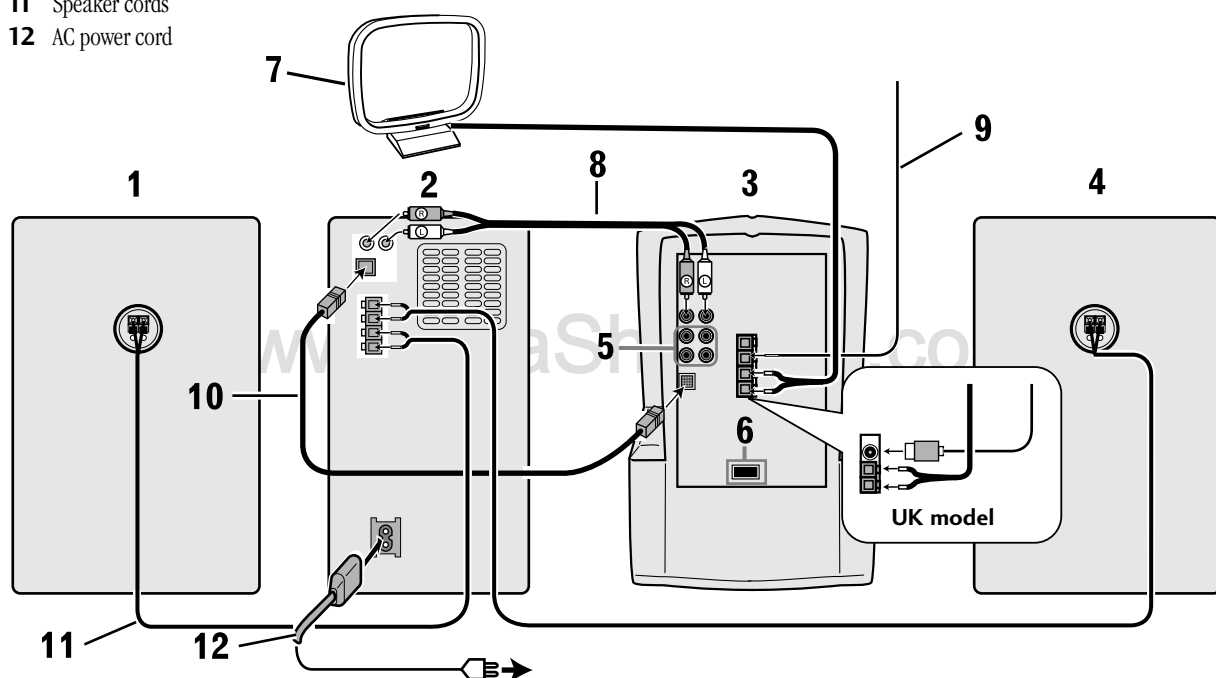
Important

Before making or changing any rear panel connections, make sure that all the components are switched off and unplugged from the power supply.

Speaker caution!

Do not connect any of the supplied speakers to any other amplifier. This may result in malfunction or fire.

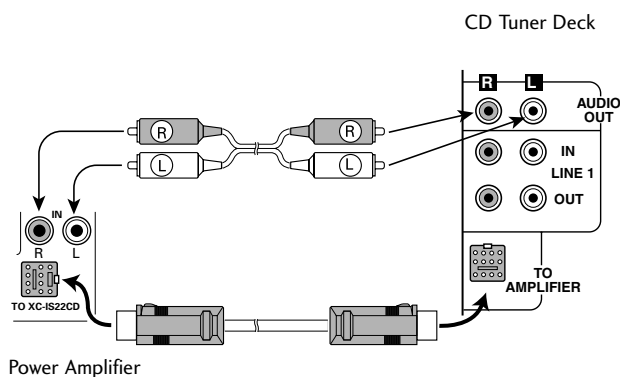
These speakers are not magnetically shielded, and may cause color noise or distortion when placed near a television set. If this occurs, move the speakers farther away.



Connecting the system components

- 1 Use the supplied system cable to connect the **TO AMPLIFIER** jack on the CD Tuner Deck to the **XC-IS22CD** jack on the power amplifier (see right).
- 2 Use the supplied **RCA pin-plug stereo cable** to connect the **AUDIO OUT** jacks on the CD Tuner Deck to the **L** and **R** jacks on the power amplifier (see right).

Connect the white plug to the **L** (left) jack at either end, and the red plug to the **R** (right) jack. Make sure the plugs are pushed in completely.



Connecting the speakers

Use the supplied red and black speaker cords to connect the speakers to the main unit. To get the best sound from the system, it's important that you connect the two strands of speaker cord for each speaker to the correct speaker terminal. The terminals and cords are color-coded to help you match them up.

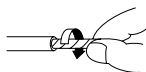
Important

Make sure that the bare speaker wires cannot touch each other, or come into contact with other metal parts once the unit is switched on.

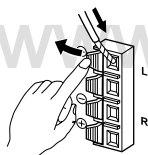
To connect a speaker cord to a terminal

This is shown in the diagrams below.

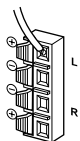
- 1 Pull off the protective covers on the ends of each cord, then twist the exposed wire strands together.



- 2 Push the tab to open, then insert the twisted wire fully into the terminal.



- 3 Release the tab to secure the speaker cord.



Connecting the radio antennas

Connecting the supplied antennas will allow you to listen to both AM and FM radio broadcasts. If you find that reception quality is poor, an outdoor antenna should give you better sound quality—see *Connecting external antennas* on page 8 for more on how to do this.

Important

Before making or changing antenna connections, make sure that the power is switched off and the unit disconnected from the wall power outlet.

- 1 Pull off the protective shields of both AM antenna wires.
- 2 Push open the tabs, then insert one wire fully into each terminal.
- 3 Release the tabs to secure the AM antenna wires.
- 4 Fix the AM loop antenna to the attached stand.

To fix the stand to the antenna, bend in the direction indicated by the arrow (**fig. A**) then clip the loop onto the stand (**fig. B**).

Note

If you plan to mount the AM antenna to a wall or other surface, secure the stand with screws (**fig. C**) before clipping the loop to the stand. Make sure the reception is clear.

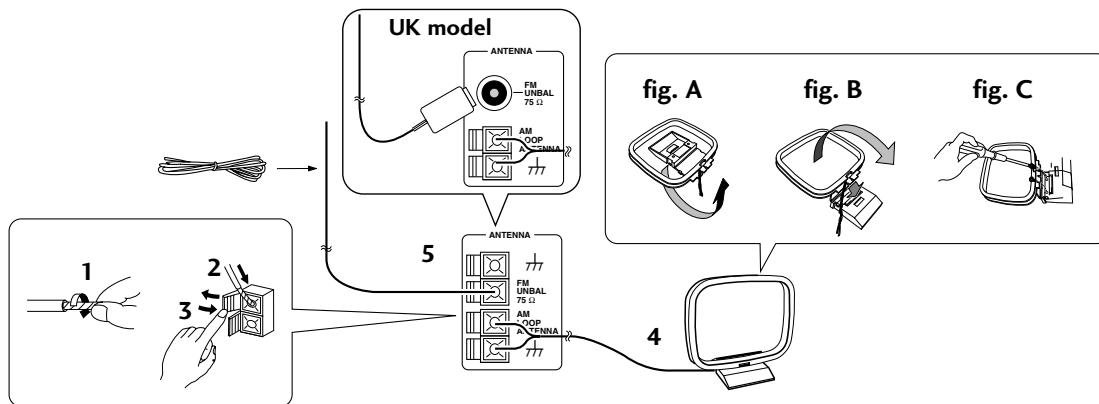
- 5 Place the AM antenna on a flat surface and point in the direction giving the best reception.

Avoid placing near computers, television sets or other electrical appliances and do not let it come into contact with metal objects.

- 6 Connect the FM wire antenna in the same way as the AM loop antenna.

For best results, extend the FM antenna fully and fix to a wall or door frame. Don't drape loosely or leave coiled up.

The supplied FM antenna is a simple means of receiving FM stations; using a dedicated, outdoor FM antenna will usually give you better reception and sound quality. See *Connecting external antennas* on page 8 for connection details.



2 Connecting up

Note

The signal ground (⏏) is designed to reduce noise that occurs when an antenna is connected. It is not an electrical safety ground.

Connecting external antennas

External AM antenna

Use 5–6 meters of vinyl-insulated wire and set up either indoors (A) or outdoors (B). Leave the AM loop antenna connected.

External FM antenna

Australian model : Use 75 Ω coaxial cable to hook up an external FM antenna (C).

UK model : Use 75 Ω coaxial cable with a PAL connector to hook up an external FM antenna (C).

Connecting auxiliary components

This system has both stereo analog inputs and outputs, as well as an optical digital output. Use these to connect external components, such as an MD, CD-R or DAT recorder.

The **OPTICAL DIGITAL OUT** is located under the terminal cover on the lower front panel. Use an optical digital cord to connect a digital recorder or AV amplifier using the optical out (**fig. 1**).

Use RCA pin-plug stereo cables to connect the **LINE 1 IN** and **LINE 1 OUT** jacks on the rear panel to a cassette deck, VCR, MD recorder, etc. (**fig. 2**)

Use stereo mini-plug cables (not supplied) to connect the **LINE 2 IN** and **LINE 2 OUT** jacks on the lower front panel to an MD player, etc. (**fig. 3**)

Connecting the power

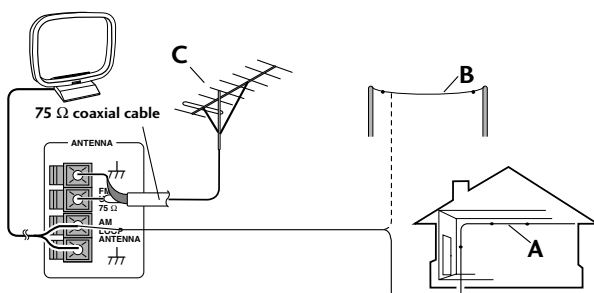
After making sure that everything is connected properly, plug in the power cord to the **AC INLET**, and the other end to a power outlet.

Congratulations! You're done setting up.

Power cord caution!

Handle the power cord by the plug. Do not pull out the plug by tugging the cord, and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed in such a way that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electric shock. Check the power cord once in a while. If you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

Australian model:



UK model:

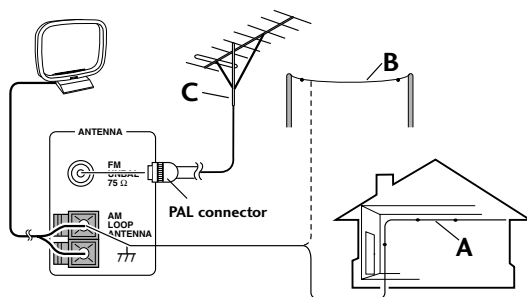


fig. 1

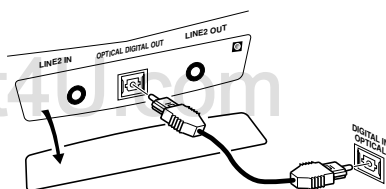


fig. 2

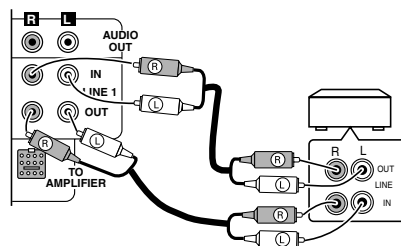
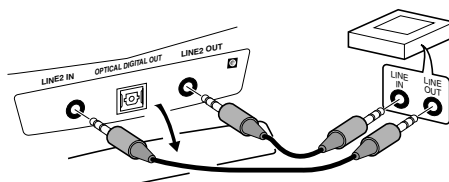


fig. 3



Connecting the optional stereo cassette deck (CT-IS21)

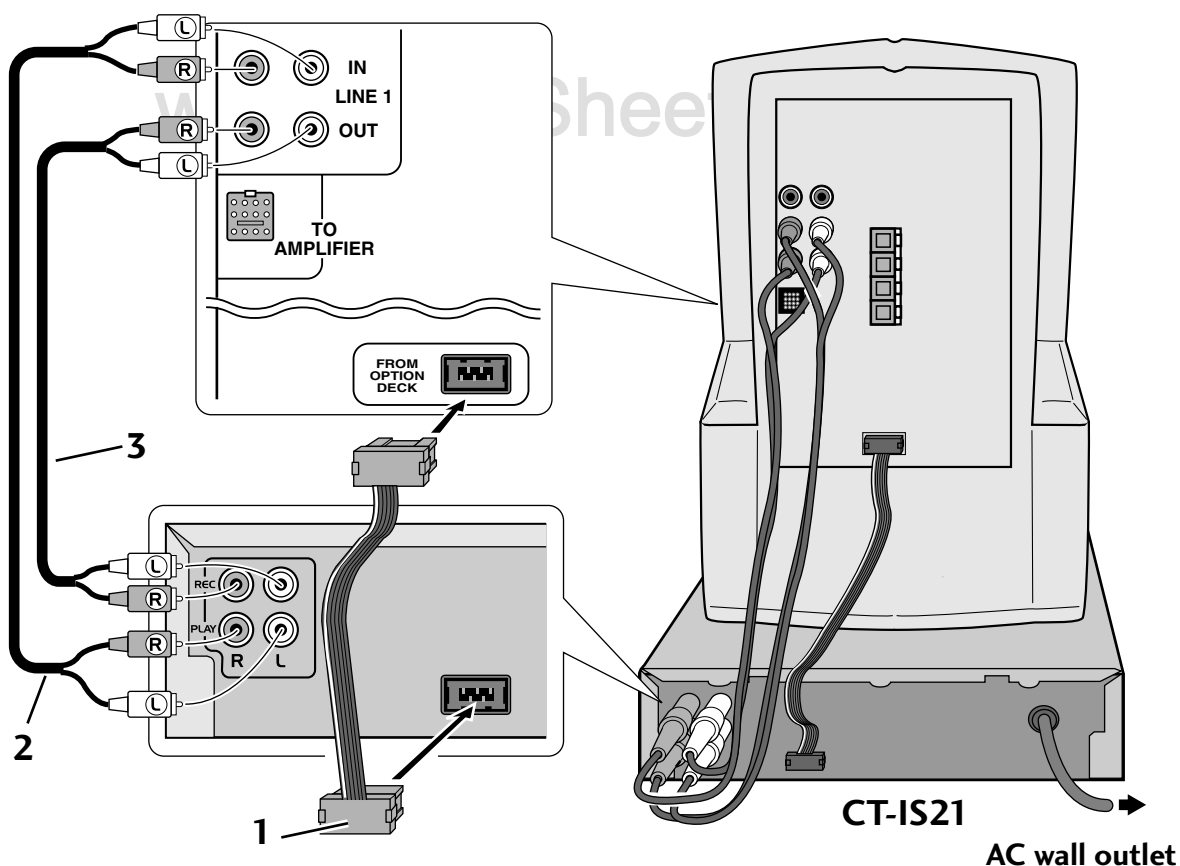
The optional cassette deck (model number CT-IS21) connects to this system using the system cable and two sets of RCA pin-plug stereo cables supplied with the CT-IS21.

- 1 Connect the system cable between the jack marked FROM OPTION DECK on the rear of this unit to the matching jack on the rear of the CT-IS21.**
Please see page 8 of the CT-IS21's operating instructions for more details on connecting the system cable.
- 2 Connect one set of stereo audio cables between the LINE 1 OUT jacks of this unit to the REC jacks of the CT-IS21.**
- 3 Connect the other set of stereo audio cables between the LINE 1 IN jacks of this unit to the PLAY jacks of the CT-IS21.**

Using this system with the CT-IS21

The instruction manual supplied with the CT-IS21 describes its use with the XC-IS21MD/XC-IS21T. Use with the XC-IS22CD is similar, though please note the following points:

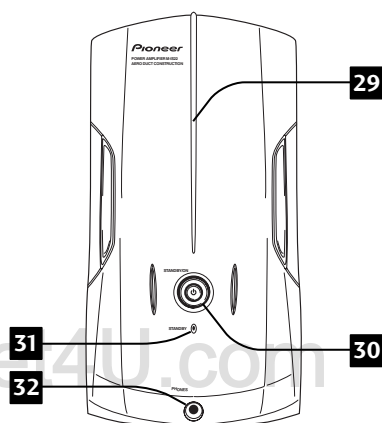
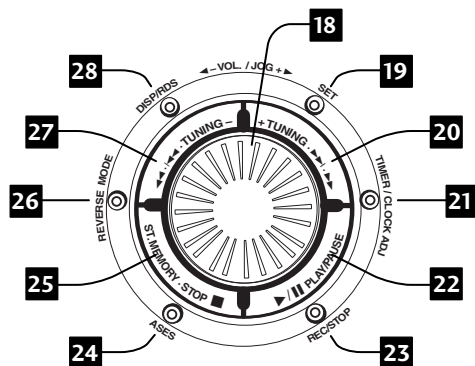
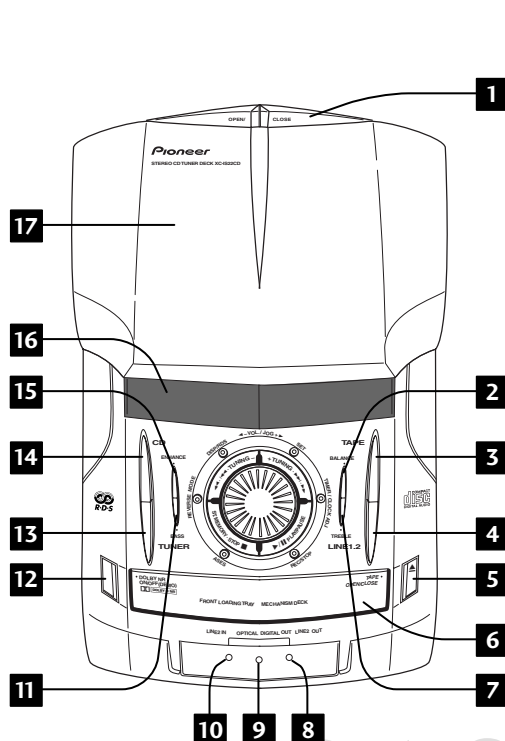
- Although the layout of the front panel and remote controls of the XC-IS21MD/XC-IS21T are different from the XC-IS22CD, the controls of the XC-IS22CD function in the same way as those on the XC-IS21MD/XC-IS21T.
- References in the manual to the 'CD MD Tuner' should be disregarded.
- All topics concerning recording to or from MD should be disregarded.



3 Controls and displays

Front Panel

This illustration is European model.



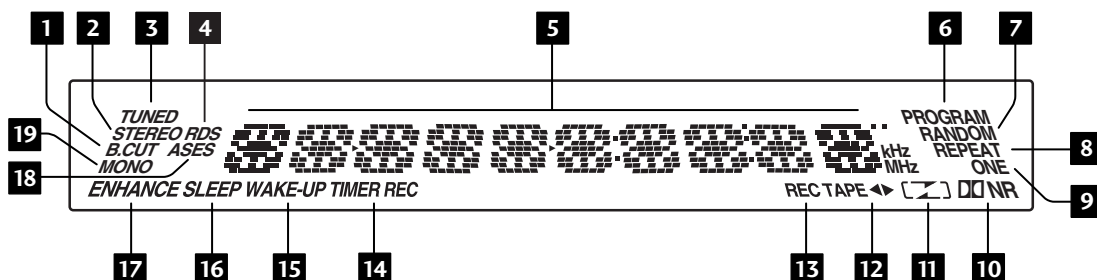
- 1 OPEN/CLOSE touch sensor (p. 12, 13)
- 2 BALANCE (p. 22)
- 3 TAPE (p. 12, 20)
- 4 LINE 1.2 (p. 12)
- 5 TAPE OPEN/CLOSE ▲ (p. 15)
- 6 Cassette tray (p. 15)
- 7 TREBLE (p. 22)
- 8 LINE 2 OUT jack (p. 8)
- 9 OPTICAL DIGITAL OUT jack (p. 8)
- 10 LINE 2 IN jack (p. 8, 23)
- 11 BASS (p. 22)
- 12 DOLBY NR ON/OFF (DEMO) (p. 15)
- 13 TUNER (p. 12, 14, 18, 23)
- 14 CD (p. 12, 20)
- 15 ENHANCE (p. 22)
- 16 Display (p. 11)
- 17 CD cover (p. 13)
- 18 ◀ - VOL. / JOG + ▶ (p. 12-13, 18, 21-23)
- 19 SET (p. 12, 18, 21-23)
- 20 + TUNING • ▶▶▶ • ▶▶▶ (p. 13-15, 18)
- 21 TIMER/CLOCK ADJUST (p. 12, 22-23)
- 22 ▶/II PLAY/PAUSE (p. 12, 13, 15)
- 23 REC/STOP (p. 20, 21)
- 24 ASES (p. 20, 21)

- 25 ST.MEMORY•STOP ■ (p. 13, 15, 17, 18, 20)
- 26 REVERSE MODE (p. 12, 15)
- 27 ◀◀ • I◀◀ • TUNING - (p. 13-15, 18)
- 28 DISP (Australian model) (p. 16)
DISP/RDS (UK model)
- 29 Bass level meter/mute indicator (Except UK model)
When a source is playing, the meters shows the level of bass. All segments light when the sound is automatically muted (during tuner search, tape winding, changing function, etc.), and when mute is on.
- 30 STANDBY/ON (p. 12)
- 31 Standby indicator
- 32 Headphone jack

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

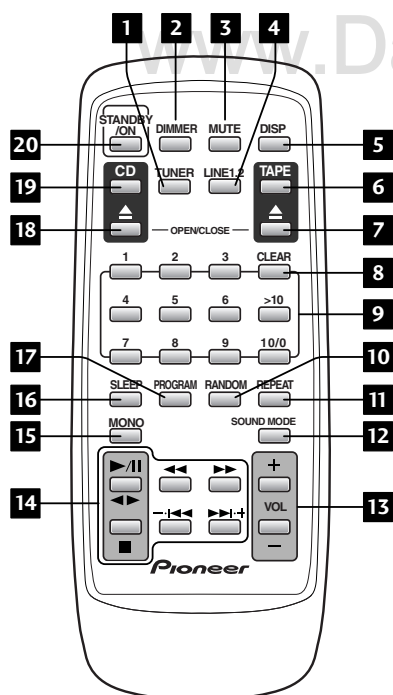
* "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Display



- 1 **B.CUT** Lights when beat cut 2 is active (p. 21)
- 2 **STEREO** Lights when listening to FM stereo radio
- 3 **TUNED** Lights when tuned to a radio broadcast
- 4 **RDS (UK model only)** Lights when in one of the RDS display or search modes
- 5 **Character display**
- 6 **PROGRAM** Lights in program play
- 7 **RANDOM** Lights in random play
- 8 **REPEAT** Lights in repeat play
- 9 **ONE** Lights in repeat one-track play
- 10 **NR** Lights when Dolby B Noise Reduction is on
- 11 **↔** Indicates the reverse mode (↔, ↔ or ↔)
- 12 **TAPE** ◀▶ Indicates the direction of tape travel (◀ (reverse) or ▶ (forward))
- 13 **REC** Lights during tape recording
- 14 **TIMER REC** Lights when the record timer is active
- 15 **WAKE UP** Lights when the wake up timer is active
- 16 **SLEEP** Lights when the sleep timer is active
- 17 **ENHANCE** Lights when one of the Enhance modes is on
- 18 **ASES** Lights during ASES (Auto Synchro Editing System) recording
- 19 **MONO** Lights when FM mono mode is on

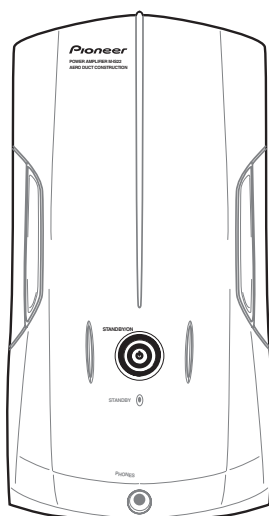
Remote control



- 1 **TUNER** (p. 12, 14, 18, 23)
- 2 **DIMMER** (p. 16)
- 3 **MUTE** (p. 22)
- 4 **LINE 1.2** (p. 12)
- 5 **DISP** (p. 16)
- 6 **TAPE** (p. 12, 20)

- 7 **TAPE** ▲ (open/close) (p. 15)
- 8 **CLEAR** (p. 17)
- 9 **Number buttons (1 – 9, 10/0, >10)** (p. 13, 17)
- 10 **RANDOM** (p. 17)
- 11 **REPEAT** (p. 17)
- 12 **SOUND MODE** (p. 22)
- 13 **VOL (volume) +, –** (p. 13)
- 14 **CD/TAPE/TUNER operation**
 - CD operation** (p. 13)
 - ▶/II (Play/pause)
 - (Stop)
 - ◀◀, ▶▶ (Manual search)
 - ◀◀, ▶▶– (Track search)
 - TAPE operation** (p. 15, 20)
 - ◀▶ (Play)
 - (Stop)
 - ◀◀, ▶▶ (Fast forward, rewind)
 - ◀◀, ▶▶– (Music search)
 - TUNER operation** (p. 14, 18)
 - ◀◀, ▶▶ (Frequency down, up)
 - ◀◀, ▶▶– (Memory station no. select)
 - The –◀◀ and ▶▶– buttons can be used in place of the **JOG dial** (front panel).
- 15 **MONO (for FM reception)** (p. 14)
- 16 **SLEEP** (p. 23)
- 17 **PROGRAM** (p. 17)
- 18 **CD** ▲ (open/close) (p. 13)
- 19 **CD** (p. 12, 20)
- 20 **STANDBY/ON** (p. 12)

4 Getting started



Switching on and setting the clock

You should now have your system installed with everything connected up and plugged in. After switching on, the first thing to do is to set the clock. This only needs to be done once (unless all power to the unit is cut) and will enable you to use the timer features.

Use the front panel controls to do this.

- 1 Press **STANDBY/ON**
- 2 Press **TIMER/CLOCK ADJ.**

CLK ADJUST

- 3 Turn the **JOG dial** until **CLK ADJ** (clock adjust) appears in the display.

If this is the first time you've switched on the unit, **CLK ADJ** should already be displayed.

- 4 Press **SET**.
- 5 Use the **JOG dial** to set the hour.

CLK 12:00 AM

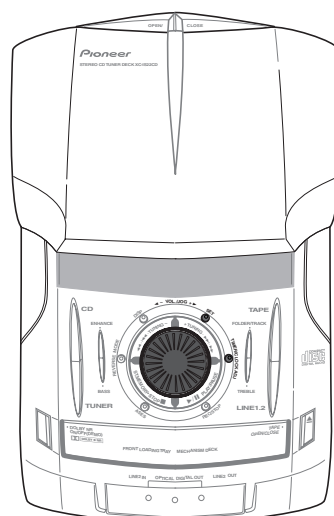
- 6 Press **SET**.
- 7 Use the **JOG dial** to set the minute.

CLK 12:00 AM

- 8 Press **SET** to finish.

CLK 12:15 AM

- Press **DISP/RDS** (**DISP** on the remote) anytime to cycle through display options to show the current time. See *Changing displays* on page 16 for more on this.



Changing the clock format

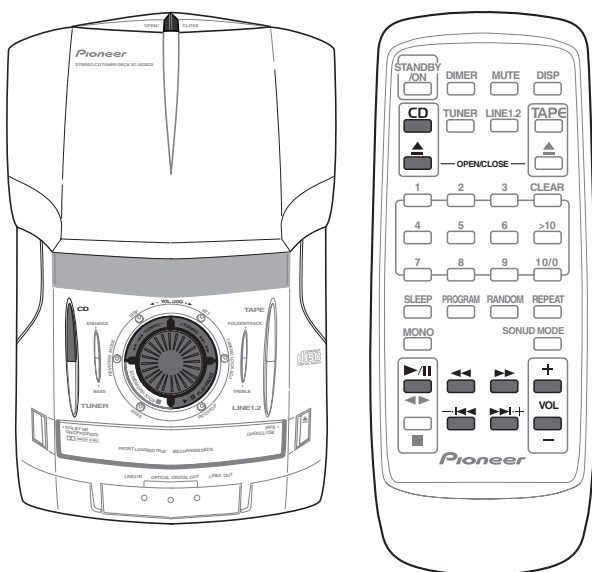
You can choose to display the clock in either 12 or 24 hour formats. The default is 12 hour display format.

- 1 Switch the system into standby.
- 2 Press and hold **REVERSE MODE** for 3 seconds.
- 3 Turn the **JOG dial** to select the clock format.
The clock format is shown in the display.
- 4 Press **SET** to confirm.
The system returns to standby.

Automatic power on buttons

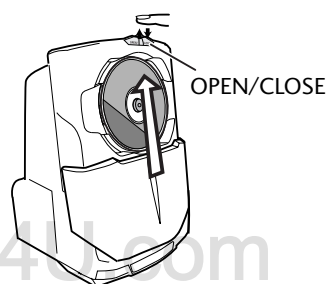
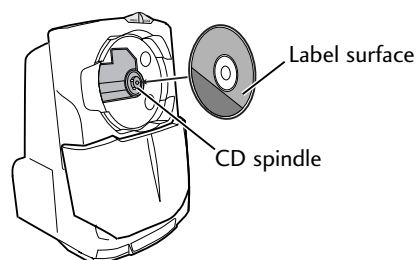
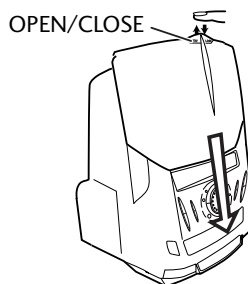
There are a number of buttons other than **STANDBY/ON** which will switch the unit on.

- **CD, TUNER, TAPE,** and **LINE 1.2** switch the unit on directly in to that function. (In the case of **CD** and **TAPE**, if there is a CD/tape loaded it will start playing.)
- **OPEN/CLOSE** touch sensor on the front panel (**CD** ▲ on the remote) switches the unit on and opens the CD cover.
- **▶/||** switches the unit on and starts playing the last selected function.



Playing CDs

- Press the CD button then lightly press the OPEN/CLOSE sensor (▲ on the remote).**
The CD cover opens. Push a CD, with the label face out, onto the disc spindle.
- Lightly press the OPEN/CLOSE sensor (or ▲) again to close the CD cover.**
- Press ►/II to start playback.**
Use the **VOL** buttons (remote) or the **JOG** dial (front panel) to adjust the playback volume.
- To pause playback, press ►/II.**
To resume playback, press again.
- To scan backward or forward, press and hold ◀◀ or ▶▶.**
On the front panel, these buttons are marked --◀◀/▶▶ and ▶▶/▶▶. +.
Release the button to resume normal playback.
- To skip back or forward to another track, press -◀◀ or ▶▶. +.**
On the front panel, these buttons are marked --◀◀/▶▶ and ▶▶/▶▶. +.
- To stop playback, press ■.**

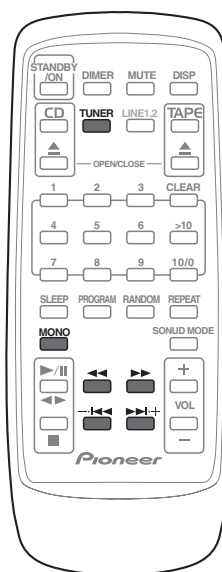
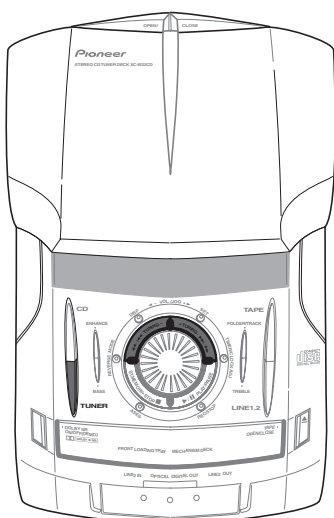


Summary of playback controls for CDs

Below is a summary of what remote control buttons do when you're playing a CD.

Button	What it does
►/II	Starts/restarts playback; pauses a disc that's playing.
■	Stops playback.
◀◀	Press & hold for fast reverse scanning.
▶▶	Press & hold for fast forward scanning.
-◀◀	Skips to the start of the current track, then to previous tracks. Press repeatedly to skip to previous tracks.
▶▶. +	Skips to the next track.
Numbers	Starts playback from the selected track number.
10/0	Use as 10 or 0 when selecting tracks.
>10	Selects tracks 10 and over. (For example, for 24, press >10, 2, 4.)

4 Getting started



Tuning in stations

The tuner can receive both FM and AM broadcasts, and lets you memorize your favorite stations so you don't have to manually tune in every time you want to listen. (See page 18)

- 1 **Press TUNER to switch to tuner mode and select the AM or FM band.**

If you're using the remote, press repeatedly to switch between **FM** and **AM**.

If you're using the front panel, press repeatedly to switch between **FM**, **AM** and **STATION** (this last option is covered on page 18).

- 2 **Tune to a frequency.**

There are three tuning modes—manual, auto, and high-speed:

Manual tuning: Press ◀◀ or ▶▶ (◀◀/▶▶ and ▶▶/▶▶+ on the front panel) repeatedly to change the displayed frequency.

Auto tuning: Press and hold ◀◀ or ▶▶ (◀◀/▶▶ and ▶▶/▶▶+ on the front panel) until the frequency display starts to move, then release. The tuner will stop on the next station it finds. Repeat to search for other stations.

High-speed tuning: Press and hold ◀◀ or ▶▶ (◀◀/▶▶ and ▶▶/▶▶+ on the front panel) until the frequency display starts to move rapidly. Keep the button held down until you reach the frequency you want. If necessary, fine tune the frequency using the manual tuning method.

When you're tuned into a station, the **TUNED** indicator lights in the display.

If the station is FM stereo, the **STEREO** indicator lights.

Improving poor FM reception

If you're listening to an FM station in stereo but the reception is weak, you can improve the sound quality by switching to mono:

- 1 **Press MONO on the remote.**

The **MONO** indicator lights when the tuner is in mono reception mode.

Press again to switch back to auto-stereo mode (the **STEREO** indicator lights when receiving a stereo broadcast).

Note

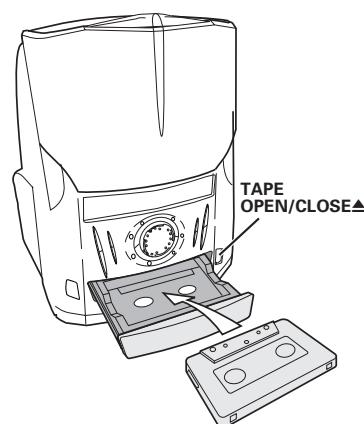
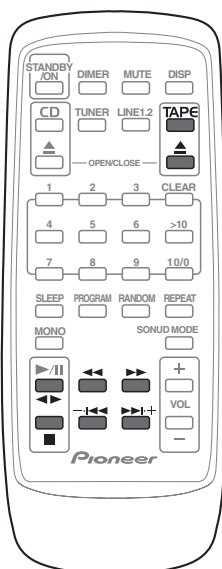
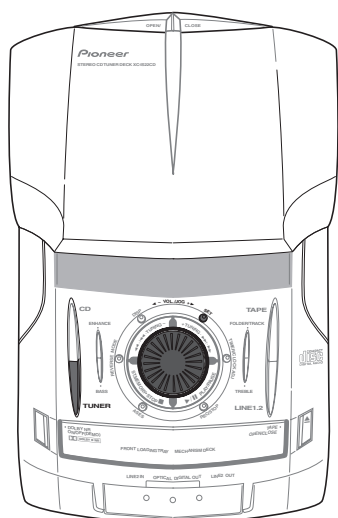
To reduce noise while recording an AM broadcast, see *Improving AM tape recordings* on page 21.

Changing the frequency step

If you find that you can't tune into stations successfully, the frequency step may not be suitable for your country/region.

Here's how to switch the setting:

- 1 **Switch the power into standby.**
- 2 **Press and hold TREBLE (front panel only) for about three seconds.**
- 3 **Use the JOG dial (front panel) or ◀◀ and ▶▶ (remote) to select the frequency step.**
Choose between:
 - **AM 9kHz/FM 50kHz**
 - **AM 10kHz/FM 100kHz**
- 4 **Press SET to confirm.**
The system returns to standby.



Playing cassette tapes

This unit has a tape deck that can be used for both recording and playback. Other features include auto-reverse and Dolby B Noise Reduction.

- Auto-reverse lets you play or record a tape without physically taking it out and turning it over.
- Dolby B NR reduces hiss on tapes recorded using Dolby B NR (which includes almost all commercially recorded tapes).

- 1 **Press the TAPE button then press TAPE OPEN/CLOSE ▲ (front panel) or ▲ (remote) and load a recorded cassette.**

Be sure to insert the cassette in the direction shown.

- 2 **Press TAPE OPEN/CLOSE ▲ again to close the tray.**

- 3 **Press DOLBY NR ON/OFF (front panel only) to switch Dolby B NR on or off as required.**

- 4 **Press REVERSE MODE (front panel only) to select the reverse mode.**

Press repeatedly to choose between:

- (single side playback)
- (auto-reverse playback: stops after finishing playback in the 'reverse' (◀) direction)
- (continuous playback (up to 16 complete plays))

- 5 **Press ◀▶ (remote) or ▶/II (front panel) to start playback.**

The side of the tape you'll hear is whichever is face up when you load it. This is the 'forward' (▶) direction, while the other side is 'reverse' (◀). The forward indicator is shown in the display.

- 6 **To play the other side of the tape, press ◀▶ (▶/II).**

Each time you press ◀▶ (▶/II) during playback, the other side of the tape starts playing. Pressing ◀▶ (▶/II) when the tape is stopped starts playback on the side it was playing previously.

The current tape direction is indicated in the display.

- 7 **To skip back or forward a track on the tape, press -◀◀ or ▶▶+.**

On the front panel, press -◀◀/◀◀ or ▶▶/▶▶+ (the tape should be playing when you do this).

▶▶+ searches for the next blank space between tracks on the side currently playing (in other words, to the start of the next track), then resumes playback.

-◀◀ searches for the previous blank space between tracks on the side currently playing (in other words, to the start of the current track), then resumes playback.

Note

Track search is unlikely to work reliably in the following cases:

- If the space between tracks is less than about 4 seconds.
- If the recording is particularly noisy so the spaces are not recognized.
- If the recording contains frequent silences, such as a language study tape.
- If the recording contains sections of very quiet material, such as some classical music recordings.

- 8 **To stop playback, press ■.**

- 9 **To fast wind the tape, press ◀◀ or ▶▶.**

On the front panel, press -◀◀/◀◀ or ▶▶/▶▶+ (the tape should be stopped when you do this).

◀◀ rewinds the tape, regardless of the tape direction at the time. ▶▶ always forward-winds the tape.

Resetting the tape counter

The tape counter indicates the current location of the tape. The counter increases when the tape is travelling forwards and decreases when it's travelling in reverse (playing or fast winding). The tape counter returns to zero automatically when you eject a tape. To reset it manually:

- **Press ■ while the tape is stopped.**
The counter returns to 0000.

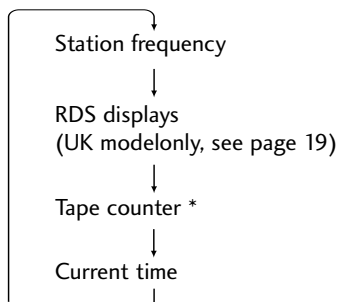
4 Getting started

Changing displays

It is possible to switch the display information while using tape, CD, or tuner functions.

Tuner displays

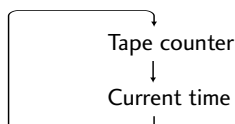
- While listening to the radio, press **DISP (DISP(/RDS) on the front panel)** to cycle through display information.



* Tape counter display only appears while tape recording.

Tape displays

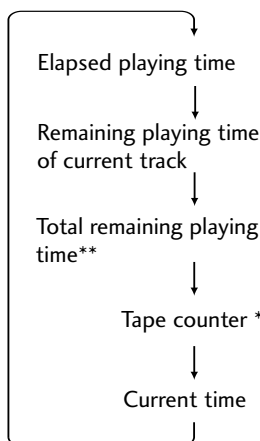
- While listening to a tape, or while it's stopped, press **DISP(/RDS)** to cycle through display information.



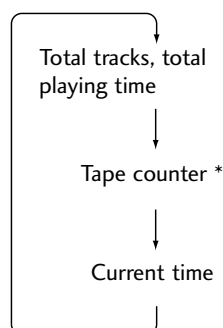
CD displays

- When using the CD function, press **DISP(/RDS)** to cycle through display information.

During CD playback:



When CD is stopped:



* Tape counter display only appears while tape recording.

** Does not appear during random play.

While a disc is stopped, you can press **--|◀◀** and **▶▶|+** to see track time information for the disc selected (up to a maximum of 30 tracks).

Dimming the display

- Press **DIMMER** to alternate between brightness levels on the display.

Programming the CD track order

Programming the track order means telling the player precisely which tracks, and in what order, you want played. You can make a program of up to 24 tracks, playing tracks more than once if you like. The program applies only to the disc in the player at the time. As soon as you eject that disc the program list is lost.

- 1 **Make sure the player is stopped, then press PROGRAM.**

The **PROGRAM** indicator lights up and you're prompted to enter the first track in the program list.

- 2 **Enter the track numbers in the order you want them played.**

For track numbers 1 to 10, use the corresponding number button.

For track numbers over 10, press the **>10** button, then enter the track number. For example, to select track 28:



Wait for the display to prompt you after completing each selection. If you make a mistake, press **CLEAR** to delete the last (most recently) programmed track.

- 3 **When you're done, press ►/II to start playback.**

Clearing the program list

You must clear the program list to resume normal playback, or to program a new program list.

- **Press ■ while the disc is stopped.**
Opening the CD cover will also clear the program list.

Clearing a track from the program list

- **When the disc is stopped, press CLEAR.**
This will delete the last (most recently) programmed track. Press repeatedly to clear several steps.

Checking what's in the program list

- **When the disc is stopped, press -◀ and ▶+.**
Each press steps through the program list, showing the step and the corresponding track number.

Playing tracks at random

Selecting random play leaves the track order of the disc up to the player. Each track on the disc is played just once, but in a random order.

- **Press RANDOM during playback or when the disc is stopped.**

The **RANDOM** indicator lights up in the display and random playback starts.

Note that starting random play during program play will erase the program list.

- **Pressing ■ cancels random play.**

Repeating tracks

Using the repeat play function you can repeat either the current track over and over, or the entire disc.

- **To repeat the current track, press REPEAT once.**
The **REPEAT ONE** indicator lights up in the display and the current track repeats until you press **REPEAT** twice (playback continues). If you press ■, playback stops, but the repeat mode remains.

You can use repeat track in normal, program or random play modes.

- **To repeat the whole disc, press REPEAT twice.**
The **REPEAT** indicator lights up in the display and the CD repeats until you press **REPEAT** (playback continues). If you press ■, playback stops, but the repeat mode remains.

You can use repeat disc in normal, random or program playback.

6 More tuner features

Saving stations for quick recall

You can save up to 30 station presets so that you always have easy access to your favorite stations without having to tune in manually each time.

If the unit is unplugged from the power supply completely, saved stations will remain for several days, after which you'll have to save them again.

Note

The following instructions assume that you are already familiar with tuning into radio stations—see page 14 for detailed tuning instructions.

Use the front panel controls to do this.

- 1 Tune into a radio station on either the AM or FM band.**
- 2 Press ST.MEMORY•STOP ■.**
The station preset number starts blinking.
- 3 Use the JOG dial to select a station preset number.**
If you're using the remote, use the —|◀◀ and ▶▶|•+ buttons. There are 30 preset locations; each can store one station preset.
- 4 Press SET to save the station preset.**
 - You can also use the number buttons on the remote to select a preset location directly. In this case, you don't need to press SET to save it.

Listening to station presets

- 1 Make sure the TUNER function is selected.**
If you're using the front panel, press **TUNER** repeatedly to select **STATION** tuning.
- 2 Use |◀◀ or ▶▶| to select a station preset.**
On the front panel, use —|◀◀/|◀◀ or ▶▶|/▶▶+.
You can also use the number buttons on the remote to select a station preset directly. For presets 1 to 10, use the corresponding number button.
For station presets over 10, press the >10 button, then enter the preset number. For example, to select preset 28:



Using RDS (UK model only)

Radio Data System, or RDS as it's usually known, is a system used by FM radio stations to provide listeners with various information—the name of the station and what kind of show they're broadcasting, for example. RDS allows you to search through stations automatically using this information. It shows up as text on the display, and you can switch between the type of information shown. Although you don't get RDS information from all FM radio stations, you do with most.

This unit lets you display three different kinds of RDS information: Radio Text, Program Service Name, and Program Type.

Radio Text (RT) is a message sent by the radio station. It can be anything the broadcaster chooses—a talk radio station might give out its telephone number as RT, for example.

Program Service Name (PS) is the name of the radio station. Program Type (PTY) indicates the kind of program currently being broadcast.

Program types

NEWS	News
AFFAIRS	Current affairs
INFO	General information
SPORT	Sports
EDUCATE	Educational material
DRAMA	Radio drama
CULTURE	Arts and culture
SCIENCE	Science and technology
VARIED	Usually talk-based material, such as quiz shows or interviews.
POP M	Pop music
ROCK M	Rock music
M.O.R. M	"Middle of the road" music
LIGHT M	'Light' classical music
CLASSICS	'Serious' classical music
OTHER M	Other music not fitting any of the above categories
WEATHER	Weather reports
FINANCE	Finance and business
CHILDREN	Children's entertainment
SOCIAL A	Social affairs
RELIGION	Religious programming
PHONE IN	Phone in talk show
TRAVEL	Holiday-type travel rather than traffic announcements, etc.

LEISURE	Leisure interests and hobbies
JAZZ	Jazz music
COUNTRY	Country music
NATION M	Popular music in a language other than English
OLDIES	Popular music from the '50s
FOLK M	Folk music
DOCUMENT	Documentaries

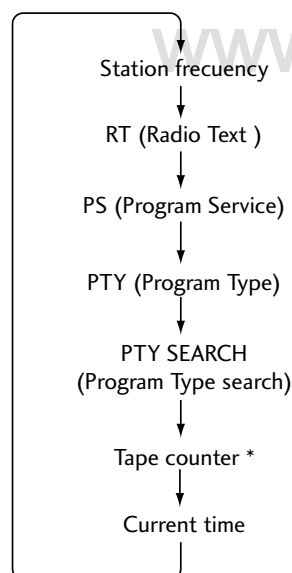
In addition, there are program types, **ALARM** and **TEST**, used for exceptional emergency announcements. The tuner will switch automatically to that station if it picks up either of these RDS signals.

Displaying RDS information

You can choose to display Program Service name (PS), Program Type (PTY), or Radio Text (RT) for the FM station you're listening to.

1 Press DISP (DISP/RDS on the front panel) to select the RDS function.

Press repeatedly to choose between:



* Tape counter display only appears while tape recording.
After about 5 seconds the RDS information will be displayed.

Note

- The RDS indicator will light in the RDS mode.
- If no RDS signal can be received, the **NO DATA** message will be displayed.
- If there is noise during the RT scroll display when in the RT mode, some characters may be temporarily displayed incorrectly.
- In the RT mode, when no RT data is transmitted, **NO DATA** is displayed.
- During RDS broadcast reception in the PTY mode, **NO TYPE** data may be displayed. In this case, it will automatically switch to PS mode after a few seconds.

Searching for a program type

You can search for a station that is broadcasting any program type from the list on page 18–19.

- 1 Select FM with the **TUNER** button.
- 2 Press **DISP** (DISP/RDS on the front panel) repeatedly to select **PTY SEARCH**.
- 3 Use **←|◀** and **▶|→** (remote) or the **JOG** dial (front panel) to choose the program type.
- 4 Press **DISP(/RDS)** to start the search.
The system starts searching through the station presets for a match. When it finds one, the search stops and the station plays for 5 seconds.
- 5 If you want to keep listening to the station, press **DISP(/RDS)** within the 5 seconds.
If you don't press **DISP(/RDS)**, searching resumes.

7 Making tape recordings

Making tape recordings

You can make tape recordings from the radio, CDs, or from an external component connected to the auxiliary inputs. If you're recording from CD it's more convenient to use the ASES mode—see *Automatically recording CDs* on this page.

Once recording has started, you can't switch to another component until recording has stopped. So, for example, you can't switch over to the tuner while you're recording a CD.

Unlike some tape decks, there's no need to set recording levels; the deck sets the level automatically. When recording, the volume, and other sound settings have no effect on the recording. This means that you can record something with the volume turned right down, if you want.

Before recording, check that the cassette erase-protect tabs have not been broken, and that the tape is Type I (normal position). You can't record on Type II (high/CrO₂) or IV (metal) tapes using this deck.

If you're recording from the start of a tape, it's a good idea to wind the tape on a little so that you don't accidentally start recording over the leader tape. You can either do this by hand, or load the tape into the deck and play the tape for 5–6 seconds.

1 Press TAPE then load a cassette into the tape deck.

In order to follow these instructions more easily, load the cassette with side A facing up.

2 Check the recording direction.

If you start recording in the ► direction, both sides of the tape can be recorded (unless the erase protect tab for side B is missing). If you switch sides and start recording in the ◀ direction, then recording will start from side B and stop when the end of the tape is reached.

If you need to change the direction, press ◀▶ (►/II on the front panel) twice, then ■.

3 Turn Dolby NR on or off as required.

Using Dolby NR improves the sound quality of tape recordings that are going to be played on Dolby NR equipped players. If the tape is not going to be played on a Dolby NR equipped player (or if you're not sure), you should leave Dolby NR off.

4 Set the reverse mode (p. 15).

- ◄ (record one side only)
- or ◄ (record both sides if recording starts in the ► (forward) direction, or one side if recording starts in the ◀ (reverse) direction)

5 Select the function you plan to record.

For example, press **TUNER** to record from the radio. If you've selected a CD, make sure that it's stopped. You cannot record while the **TAPE** function is selected.

6 Prepare the source for recording.

For example, tune in the radio station.

7 Press REC/STOP (front panel only).

The deck starts recording.

8 Start the source playing (if necessary).

9 When you're ready to stop recording, press REC/STOP again.

Automatically recording CDs (ASES)

Auto Synchro Editing System (ASES for short) makes recording one or more CDs automatic. It also makes sure that a CD track isn't spread over two sides of a tape.

If the tape runs out midway through a CD track, the same track is automatically recorded from the beginning again on the other side. Note that repeat playback is canceled when you use ASES recording.

1 Prepare the tape deck for recording.

Load a blank cassette and wind on past the leader. Switch Dolby NR on or off as required and set the reverse mode. Recording starts in the ► (forward) direction, so take care over which way you load the tape.

2 Load the CD you want to record.

3 Press the CD function button, then press ■.

The CD should now be selected, but not playing.

If you want to record the tracks in a different order, use the program play feature—see page 17 for how to do this.

4 If you want to record only one track, select 1-track ASES using the -◄ and ►-+ buttons.

5 Press ASES to start recording.

Recording finishes automatically when the end of the disc is reached, or the tape ends (whichever comes first).

6 If you want to stop recording before the end of the CD, press ■.

Note

ASES may not work correctly if the first side of the tape finishes at the same time as a CD track ends. If this happens, stop the recording then resume on the other side without ASES.

Improving AM tape recordings

Recording AM broadcasts on cassette tape can result in noisy recordings. If you experience this, change the beat cut mode.

- 1 Switch the system into standby.**
- 2 Press REC/STOP for about 3 seconds.**
Release when the display reads **B.CUT 1** (or **B.CUT 2** if you have previously switched the beat cut mode).
- 3 Use the JOG dial to select B.CUT 1 or B.CUT 2 mode.**
- 4 Press SET.**
The system returns to standby.

Reducing the source signal level

Some CDs and MDs may produce a high signal level which may produce unpleasant distortion if recorded on the built-in tape recorder. In such cases, you may need to reduce the signal level of the **LINE 1** source by switching on the attenuator.

- 1 Switch the system into standby.**
- 2 Press and hold the ASES button for about three seconds.**
- 3 Use the JOG dial to select ATT ON.**
- 4 Press SET.**
The system returns to standby. **LINE 1 *** will appear when **LINE 1** is selected as a source. To switch off the attenuator, repeat steps 1–4, selecting **ATT OFF** in step 3.

8 Adjusting the sound

Adjusting the bass, treble and balance

To help you get the sound you want you can increase or reduce the bass and treble, or change the left/right balance.

- 1 Press **SOUND MODE (remote)** to select **BASS, TREBLE** or **BALANCE**.
If you're using the front panel controls, press **BASS, TREBLE** or **BALANCE**.
- 2 Use the **←|◀◀** and **▶▶|→** buttons (remote) or the **JOG dial (front panel)** to adjust the sound.
The bass and treble can be adjusted in the range **-4** to **+4**; balance from **Left 10** to **Right 10**.
Note: To confirm the setting and exit immediately, you can press **SET** on the front panel.

Creating wider stereo sound

The Enhance feature makes the stereo spread appear wider than it really is — useful when the speakers are close together.

- 1 Press **SOUND MODE (remote)** to select **ENHANCE**.
If you're using the front panel controls, press **ENHANCE**.
- 2 Use the **←|◀◀** and **▶▶|→** buttons (remote) to select the **ENHANCE** mode.
 - **ENHANCE 1**
 - **ENHANCE 2**
 - **OFF (ENHANCE 0)**

If you're using the front panel controls, press **ENHANCE** to select the Enhance mode.

Note: To confirm the setting and exit immediately, you can press **SET** on the front panel.

Muting the sound

If you need to momentarily turn off any sound coming out of the speakers, use the **MUTE** button to turn the volume down to zero.

- 1 Press **MUTE** to switch off the volume.
The bass/mute indicator on the amplifier unit lights up (except UK model) and **MUTE** is displayed briefly.
To switch the sound back on, press **MUTE** again.

Using the timer

Setting the wake-up timer

Use the wake-up timer to set the system to switch on at any time and start playing your choice of source.

Note

- The clock must be set to the correct time for the wake-up timer to work properly. (see page 12)
- You cannot have the record timer and the wake-up timer set at the same time.

- 1 **Select the source you want played.**
For example, press **TUNER** to select the radio as your source.
- 2 **Prepare the source.**
For example, tune in the radio station you want to wake up to. If you've selected a CD or tape, make sure that it's stopped.
- 3 **Set the volume.**
- 4 **Press TIMER/CLOCK ADJ.**
- 5 **Turn the JOG dial until you see WAKE UP displayed.**
- 6 **Press SET.**
- 7 **Turn the JOG dial until you see TIMER EDIT displayed.**
- 8 **Press SET.**
- 9 **Set the switch-on time.**
Use the **JOG** dial to set the hour, then press **SET**. Set the minute in the same way, pressing **SET** when you're done.
- 10 **Set the switch-off time.**
Use the **JOG** dial to set the hour, then press **SET**. Set the minute in the same way, pressing **SET** when you're done.
The **WAKE UP** indicator lights and switch-on and switch-off times are confirmed in the display after pressing **SET** this last time.
- 11 **Switch the system into standby mode.**
The wake up timer will not work if the system is left on!
 - You can check the timer settings in standby by pressing **TIMER/CLOCK ADJ.**

Turning the wake-up timer on/off

If the wake-up timer is active, it will switch on everyday at the time you have set. Here's how to turn it on or off:

- 1 **Press TIMER/CLOCK ADJ.**
- 2 **Turn the JOG dial until WAKE UP is displayed.**
- 3 **Press SET.**
- 4 **Turn the JOG dial until TIMER ON or TIMER OFF is displayed.**
You must have the timer set (see above) to select **TIMER ON**.
- 5 **Press SET.**
The **WAKE UP** indicator lights when the timer is active and disappears when it's inactive.

Setting the sleep timer

The sleep timer switches off the system after a specified time so you can fall asleep without worrying about it.

Note

If you set the sleep timer while either the wake-up or record timer is active, the earlier switch off time takes priority.

1 Press SLEEP (remote only) to select a switch-off time.

Press repeatedly to switch between:

- **AUTO** – System switches off 1 minute after the current source has finished playing. You can only set this during CD or tape playback. CD repeat play and endless play (for tapes) does not work with the automatic sleep timer.
- **90** – system switches off after 90 minutes
- **60** – system switches off after an hour
- **30** – system switches off after 30 minutes
- **OFF/0** – cancels the sleep timer

2 To check how much time is left, press SLEEP.

The remaining time is displayed momentarily. Don't press **SLEEP** again while the time is displayed or you'll change the sleep timer to a different setting!

Setting the record timer

You can set the timer to record from the **LINE 1 IN** or **LINE 2 IN** jacks, or something off the radio. For example, you might want to record a program that is broadcast while you're at work. During the actual recording, the volume is automatically set to minimum. After the recording has finished, the record timer is canceled.

Note

The clock must be set to the correct time for the record timer to work properly.

1 Set up the tape deck.

Load a cassette tape, wind on past the leader tape, switch on/off Dolby NR as required and set the reverse mode (see page 20 for more on recording cassette tapes).

2 Press TUNER to select the tuner.

3 Tune in the station you want to record.

See page 14 for more detailed instructions on tuning.

4 Press TIMER/CLOCK ADJ.

5 Turn the JOG dial until the display shows TIMER REC, then press SET.

6 Turn the JOG dial until TIMER EDIT is displayed.

7 Press SET.

8 Set the record start time.

Use the **JOG** dial to set the hour, then press **SET**. Set the minute in the same way, pressing **SET** when you're done.

9 Set the record end time.

Use the **JOG** dial to set the hour, then press **SET**. Set the minute in the same way, pressing **SET** when you're done.

10 For users of the optional cassette deck only: Use the JOG dial to select the built-in deck (TAPE) or the optional deck (OP TAPE).

After selecting, press **SET**.

11 Check that the settings are correct.

The switch-on and switch-off times are confirmed in the display and the **TIMER REC** indicator lights.

12 Switch the system into standby mode.

The record timer will not work if the system is left on!

- You can check the timer settings in standby by pressing **TIMER/CLOCK ADJ.**

Turning the record timer on/off

1 Press TIMER/CLOCK ADJ.

2 Turn the JOG dial until TIMER REC is displayed.

3 Press SET.

4 Turn the JOG dial until TIMER ON or TIMER OFF is displayed.

You must have the timer set (see above) to select **TIMER ON**.

5 Press SET.

The **TIMER REC** indicator lights when the timer is active and disappears when its inactive.

10 Additional information

Taking care of your system

To clean this unit, wipe with a soft, dry cloth. For stubborn dirt, wet a soft cloth with a mild detergent solution made by diluting one part detergent to 5 or 6 parts water, wring well, then wipe off the dirt. Use a dry cloth to wipe the surface dry. Do not use volatile liquids such as benzene or thinner which may damage the surfaces.

Disc lens cleaner

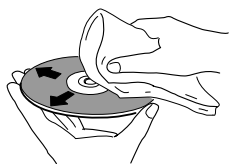
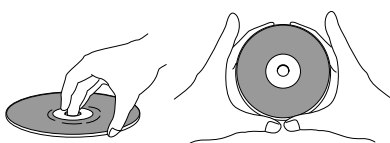
The disc pickup lens should not become dirty in normal use, but if for some reason it should malfunction due to dirt or dust, consult your nearest PIONEER authorized service center. Although lens cleaners for CD players are commercially available, we do not recommend using them since some may damage the lens.

Taking care of your discs

When holding discs, take care not to leave fingerprints, dirt or scratches on the disc surface. Hold the disc by its edge or by the center hole and edge. Damaged or dirty discs can affect playback performance. Take care also not to scratch the label side of the disc. Although not as fragile as the recorded side, scratches can still result in a disc becoming unusable.

Should a disc become marked with fingerprints, dust, etc., clean using a soft, dry cloth, wiping the disc lightly from the center to the outside edge as shown below. If necessary, use a cloth soaked in alcohol, or a commercially available CD cleaning kit to clean a disc more thoroughly. Never use benzine, thinner or other cleaning agents, including products designed for cleaning vinyl records.

- Wipe lightly from the center of the disc using straight strokes.
- Don't wipe the disc surface using circular strokes.



Storing discs

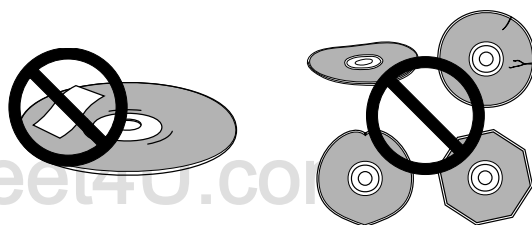
Although CDs are more durable than vinyl records, you should still take care to handle and store discs correctly. When you're not using a disc, return it to its case and store upright. Avoid leaving discs in excessively cold, humid, or hot environments (including under direct sunlight).

Don't glue paper or put stickers on discs, or write on them using a pencil, ball-point pen or other sharp-tipped writing instrument.

Discs to avoid

Discs spin at high speed inside the player during playback. If you can see that a disc is cracked, chipped, warped, or otherwise damaged, don't risk using it—you could end up damaging the unit.

This system is designed for use with conventional, fully circular CDs only. Use of shaped discs is not recommended. PIONEER disclaims all liability arising in connection with the use of shaped discs.



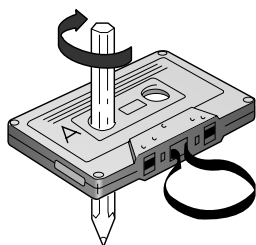
Using cassette tapes

The tape of a cassette is quite easily damaged and loose tape can jam in the tape deck mechanism. If the tape has become unwound, use a pen or pencil to wind it back on to the spool.

When not using cassettes, always store in the case. Store cassettes away from magnetic fields, excessive heat, humidity, dust or oil. Before recording on a tape, wind the tape on past the leader tape (about the first 3 or 4 seconds of each side).

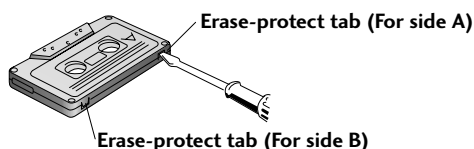
Tapes you should avoid

Since tapes longer than 90 minutes are so thin, they are more susceptible to jamming in the tape deck mechanism and other trouble such as irregular winding. Avoid using cassette tapes longer than 90 minutes.

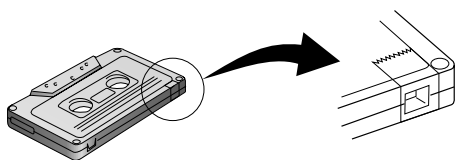


Protecting your recordings

You can protect an important recording against accidental erasure by breaking the erase-protect tab(s) with a small screwdriver.



If you want to re-record on an erase-protected cassette, cover the space left by the broken tab with self-adhesive tape.



Cleaning the tape heads

To maintain good performance and sound quality, we recommend that you clean the deck's tape heads periodically (once every 10 hours of use).

Use a commercially available wet-type head cleaning cassette, following the instructions provided by the manufacturer.

Caution!

- Make sure that the head cleaning cassette you buy is compatible with auto-reverse decks. Check with a Pioneer authorized service center for details.
- Do not use dry-type head cleaning cassettes.
- After cleaning, do not play a cassette for 2–3 minutes to allow the cleaning liquid to dry.

Demagnetizing the tape heads

Through continued use, the playback/record tape head becomes magnetized, resulting in loss of performance and sound quality.

Use a commercially available head demagnetizer periodically, following the instructions provided by the manufacturer.

Caution!

- When using a head demagnetizer, you should turn the volume down to minimum and unplug any headphones that are connected.

10 Additional information

Troubleshooting

Problem	Remedy
General	
No sound	<ul style="list-style-type: none"> • Check that speakers and other system components are properly connected. • Check that the input selector is set correctly.
Can't switch between functions	<ul style="list-style-type: none"> • If the cassette deck is currently recording, you can't change the function.
Timer doesn't work	<ul style="list-style-type: none"> • Make sure that the clock is set.
Remote control doesn't work	<ul style="list-style-type: none"> • Try replacing the batteries • If a fluorescent lamp is near the remote sensor on the main unit, it can interfere with remote operation. • Make sure that you're using the remote within its operating range.
Power doesn't come on	<ul style="list-style-type: none"> • Check that system cables are connected properly.
CD player	
CD won't play	<ul style="list-style-type: none"> • Check that the CD is loaded the right way (label side should be face out). • Check that the CD is clean and free of scratches and other damage. • Check that the function is set to CD.
Tuner	
Can't tune into any radio stations or sound is distorted	<ul style="list-style-type: none"> • Check that the antenna is properly connected. • Experiment with the placement of the antenna. • Make sure that other electrical appliances (fluorescent light, hairdryer, etc.) are not being used closeby. • Check that the tuning frequency interval is set correctly for your region/country.
A stereo broadcast is played in mono	<ul style="list-style-type: none"> • If the mono indicator is lit, press MONO to switch it off.
Tape deck	
Can't record	<ul style="list-style-type: none"> • Check that the tape you want to record on still has the erase-protect tabs in place, or that they are covered with tape, etc.
Recordings are muddy or distorted, or you can still hear a previous recording under the new one	<ul style="list-style-type: none"> • Clean the tape heads.
Excessive tape hiss and over-emphasized high frequencies	<ul style="list-style-type: none"> • Make sure that Dolby NR is in the same position as when the tape was recorded.
Dull, muffled sound	<ul style="list-style-type: none"> • Make sure that Dolby NR is in the same position as when the tape was recorded.
Recording made from the LINE 1 input are distorted	<ul style="list-style-type: none"> • Set the LINE 1 input level to ATT ON.
Recording made from the LINE 1 input very quiet	<ul style="list-style-type: none"> • Set the LINE 1 input level to ATT OFF.

Specifications

Amplifier section

Continuous Power (RMS)	100 W + 100 W (1 kHz, THD 10%, 6 Ω)
Continuous Power (DIN)	65 W + 65 W (1 kHz, THD 1%, 6 Ω)
Music Power (DIN)	150 W + 150 W (1 kHz, THD 1%, 6 Ω)

FM Tuner Section

Frequency Range	87.5 - 108MHz
Antenna	75 Ω , unbalanced

AM Tuner Section

Frequency Range	531 kHz - 1,602 kHz (9 kHz step); 530 kHz - 1,700 kHz (10 kHz step)
Antenna	Loop antenna

Compact Disc Player Section

Type	Compact disc digital audio system
Usable discs	Compact discs
Wow and Flutter	Limit of measurement (0.001%) or less (EIAJ)

Cassette Deck Section

System	4-track, 2-channel stereo
Heads	Recording/playback head x 1 Erasing head x 1
Motor	DC Servo motor x 1
Tape type	TYPE I (Normal)

Miscellaneous

Power Requirements	
Australian model	AC240 V, 50/60 Hz
UK model	AC230 V, 50/60 Hz
Power Consumption	
Australian model	120 W
UK model	120 W
Power Consumption in standby mode	1 W

Dimensions:

CD Tuner Deck	204 (W) x 300 (H) x 237 (D) mm
Power Amplifier	160 (W) x 300 (H) x 237 (D) mm

Weight:

CD Tuner Deck	2.7 kg
Power Amplifier	4.1 kg

Accessories (CD Tuner Deck)

Operating Instructions	2
Remote control unit	1
Power cord	1
System cable	1
RCA pin-plug stereo cable	1
FM antenna	1
AM loop antenna	1
Dry cell batteries (AA/R6P)	2
Warranty Card	1

Speaker System S-IS22

Enclosure	Bass-reflex bookshelf type
System	17 cm 3-way system

Loudspeakers:

Woofer	17 cm cone type
Mid-range	6.6 cm cone type
Tweeter	2 cm dome type
Nominal impedance	6 Ω
Frequency response	40 Hz to 20 kHz
Maximum power	100 W
Dimensions	215 (W) x 372 (H) x 274 (D) mm
Weight	4.1 kg

Accessories (Speaker System)

Speaker cords	2
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Note

Specifications and design subject to possible modification without notice, due to improvements.

Demonstration function

The demonstration function starts automatically when the unit is plugged in, or if it has been sitting idle in the **TAPE** or **CD** function for more than 5 minutes. It stops once the unit is switched on or when you start playback.

In standby, you can start the demo by pressing **DOLBY NR (DEMO)** and holding for 3 seconds.

To switch off the demo function completely, press and hold **DOLBY NR (DEMO)** for 3 seconds while the unit is showing the demo. (Repeat this process to switch the demo back on.)

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