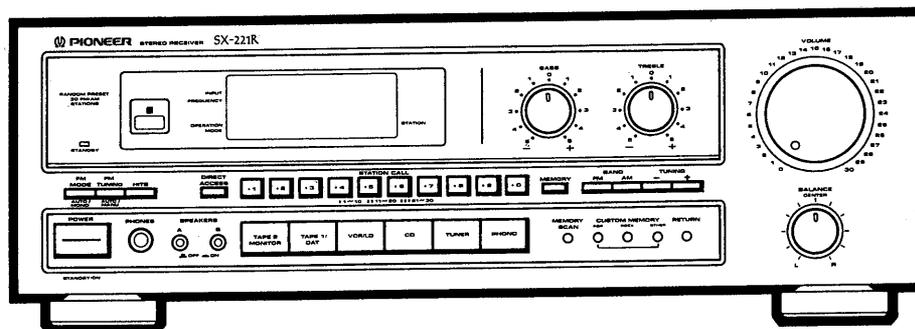# Operating Instructions

STEREO RECEIVER

SX-121
SX-221R

HB/YPW

* Illustration shows model SX-221R.

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.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT 1

The lightning flash with arrowhead, 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.

IMPORTANT 2

If the apparatus is fitted with AC mains power outlet(s), see REAR PANEL FACILITIES for convenient connection of additional Hi-Fi component(s). Make all connections to the AC outlet(s) and the signal terminals first. Connect the plug to the wall socket last (make sure that the power switch is off.)

FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accordance with the following code:
    Blue: Neutral
    Brown: Live
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured marking 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.
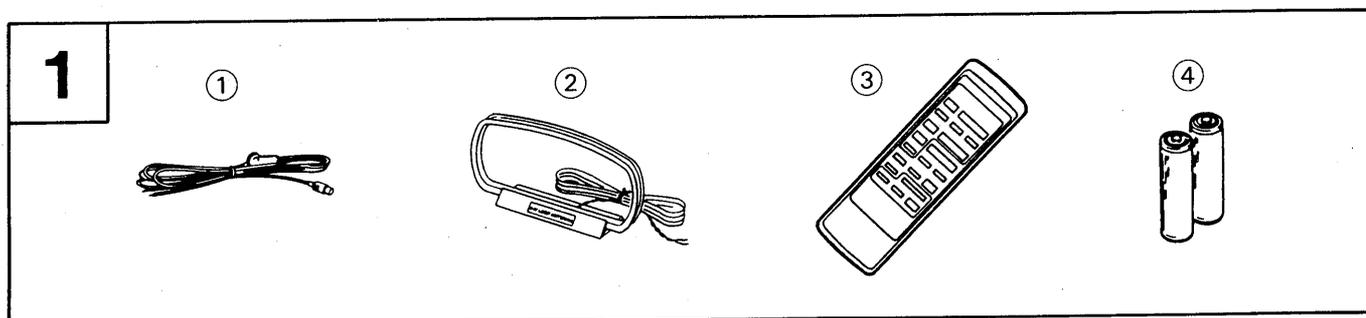Do not connect either wire to the earth terminal of a three pin plug.
Equipment sold in the U.K. is not supplied with a power plug.

ⓦ PIONEER®
The Art of Entertainment

CONTENTS

CHECKING ACCESSORY ITEMS

See Fig 1.

① FM T-type Antenna
② AM Loop Antenna
③ Remote control unit (SX-221R only)
④ Dry cell battery
   (size "AAA" (IEC R03/UM-4)) (SX-221R only)

INSTALLATION

LOCATION

Install the receiver in a well ventilated location where it will not be exposed to high temperature or humidity.

Do not install the receiver in a location which is exposed to direct rays of the sun, or near to hot appliances or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the receiver in a damp or dusty environment may result in malfunction or accident. (Also avoid installation near cookers etc., where the receiver may be exposed to smoke from oil, steam or heat.)
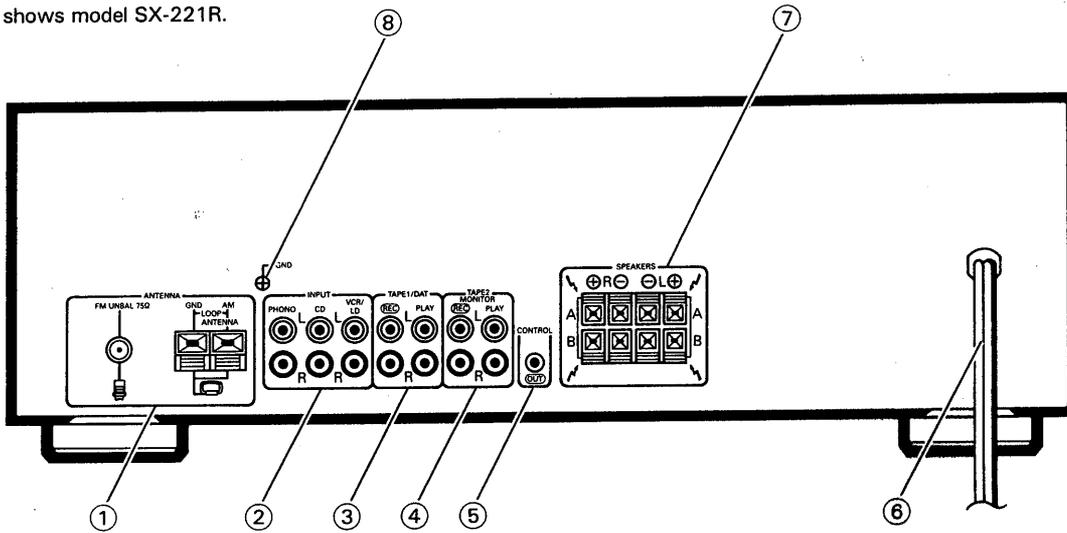
POWER-CORD CAUTION

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 such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

MAINTENANCE OF EXTERNAL SURFACES

• Use a polishing cloth or dry cloth to wipe off dust and dirt.
• When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
• Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

REAR PANEL FACILITIES

* Illustration shows model SX-221R.

① FM/AM ANTENNA terminals
Use these antenna terminals for receiving FM and AM broadcasts.

② INPUT jacks
PHONO ...... Connect to the output cables from a turntable.
CD .... Connect to the output jacks of a compact disc player.
VCR/LD ...... Connect to the output jacks of a video cassette recorder or Laser Disc player.

③ TAPE 1/DAT jacks
Connect these jacks to the cassette deck or digital audio tape deck.

④ TAPE 2 MONITOR jacks
Connect these jacks to the cassette deck.

⑤ CONTROL OUT jack (SX-221R only)
Connect this jack to other Pioneer components bearing the 𝖲𝖱 mark when using the remote control of this unit to control the other components.

To the CONTROL IN jack of other component.

Receiver   Pioneer component bearing the 𝖲𝖱 mark.

Remote control unit

⑥ Power cord

⑦ SPEAKERS terminals
A: Connect to a first set of speakers.
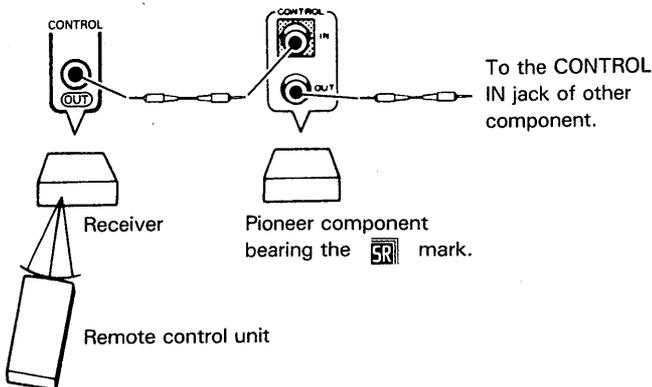B: Connect to a second set of speakers.

NOTE:
No sound will be heard through the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.
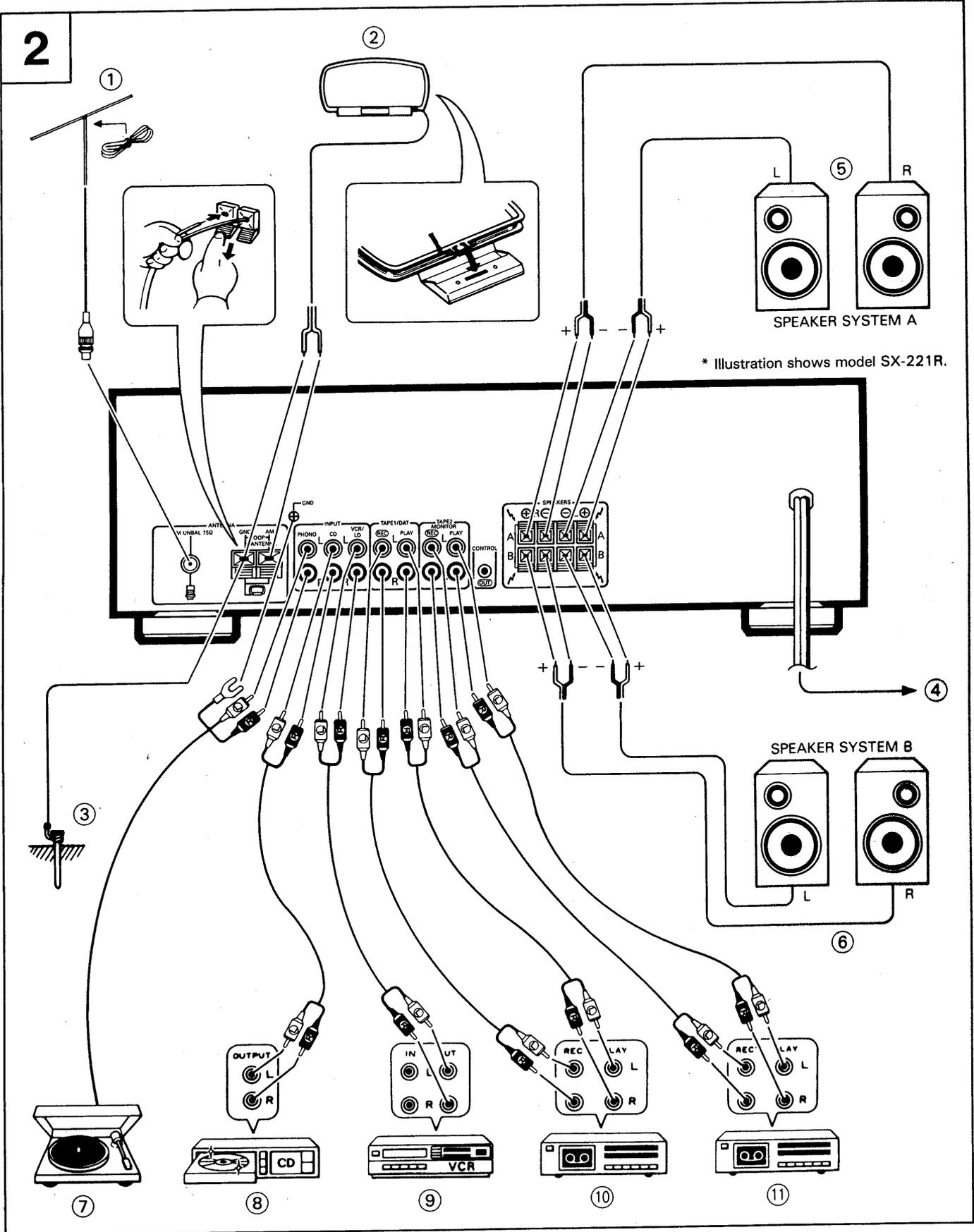
⑧ GND terminal
Connect to the ground lead of a turntable.
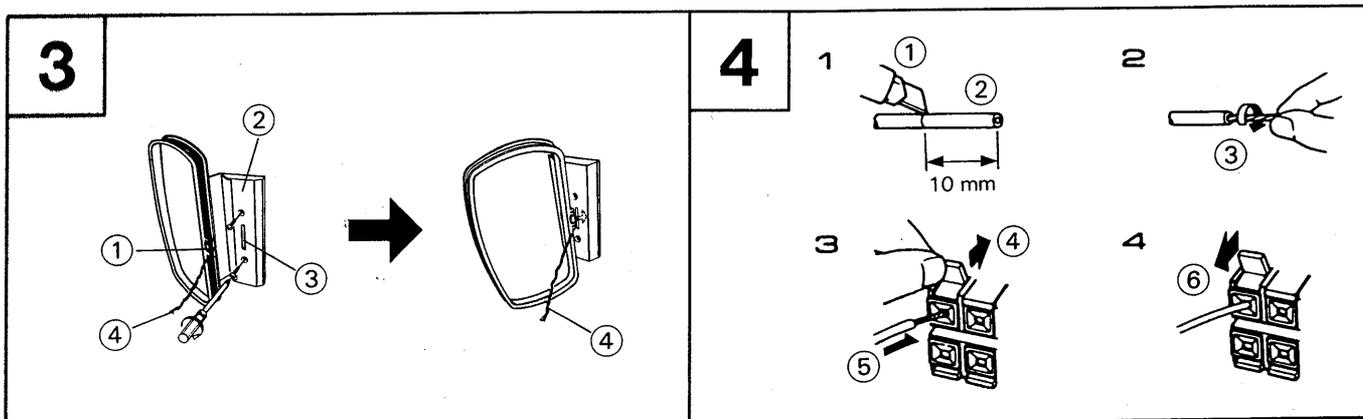Use a screwdriver to connect with the ground terminal.

2

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

SPEAKER SYSTEM A

* Illustration shows model SX-221R.

SPEAKER SYSTEM B

See Fig 2.

(1) FM T-type antenna
(2) AM loop antenna
(3) Ground
(4) AC wall socket
(5) Speaker system A
(6) Speaker system B
(7) Turntable
(8) CD player
(9) VCR or LD player
(10) Cassette deck or digital audio tape deck
(11) Cassette deck

Setting up the AM antenna
(See Fig 3)

• Insert the claw on the bottom of the antenna into the groove in the leg.
• Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.
• Use the attachment hole in the leg to screw to wall or other location, then insert the claw on the bottom of the antenna into the groove in the leg (fixing the antenna in the direction that gives the best reception).

(1) Claw (2) Leg (3) Groove (4) Lead wire

Antenna ground

Although grounding is not necessary for reception it is recommended for protection against damage from lightning if an outdoor FM antenna is used. Grounding is also recommended to help reduce noise and hum.

NOTE:
Never make the ground connection to a gas pipe as sparks could cause the gas to ignite.

Connecting the speaker cords
(See Fig 4)

NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

(1) Cutter
(2) Speaker cord
(3) Twist the strands
(4) Push up
(5) Insert
(6) Pull down

Connecting the input/output cords

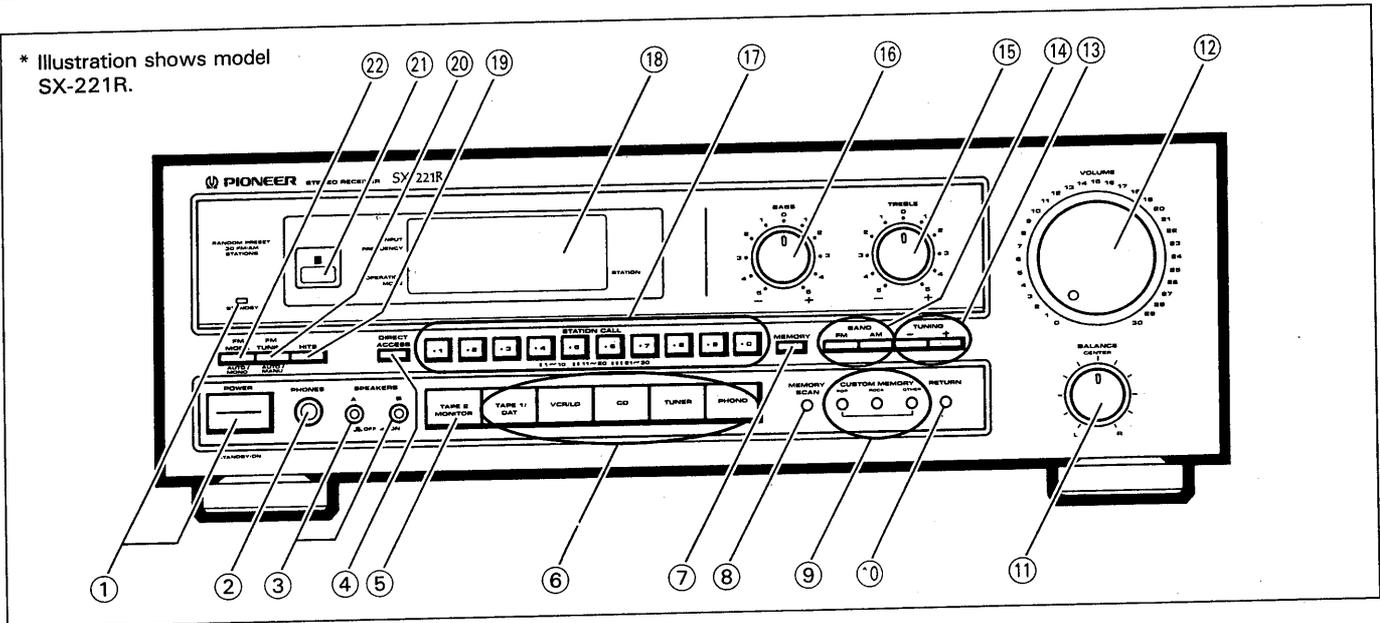When another stereo component (purchased separately) is connected, note the following instructions:
• Connect the plugs properly. Faulty connections can cause noise and also breakdowns and failures.
• The white terminal is for the left channel and the red terminal is for the right channel.

NOTE ABOUT SPEAKER CONNECTIONS

• Connect speaker systems with a nominal impedance of range from 8 to 16 Ω.
• Be sure that connections are secure. Check to make sure that wires do not protrude from their terminals.
• Do not allow the speaker cords to become short-circuited. Damage may result to your unit.
• Do not attempt to simultaneously connect two sets of speakers to a single side (A or B). When using two sets of speakers, connect one set to side A and one set to side B.

FRONT PANEL FACILITIES

* Illustration shows model
  SX-221R.

[SX-221R]

① POWER (STANDBY/ON) switch/STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
When the STANDBY indicator lights, the unit is in STANDBY and goes out during ON.

• When not using the unit for a long period, disconnect the power cord.

[SX-121]

① POWER switch

When this switch is pressed, power is supplied to the unit.
Press the switch again to turn power OFF.

[Timer ON/OFF possible]
When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE (SX-121, SX-221R):
When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

② PHONES jack

Connect the plug on your headphones to this jack. To listen to a program only through the headphones, set both SPEAKERS A and B buttons to the OFF position.

③ SPEAKERS buttons (▉ OFF, ━ ON)

These are used to select the speaker through which you wish to listen.
A: When the speakers connected to A terminals are in use.
B: When the speakers connected to B terminals are in use.
• Turn both A and B speakers to the OFF position when only headphones are in use.

NOTE:
No sound will be heard through the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

④ DIRECT ACCESS tuning button

When this button is pressed, the STATION CALL buttons function as 10-key number buttons for direct input of the desired reception frequency. Press again to cancel this mode.
If the input station falls outside of the receiver's tuning range, the display section will display a message: "UPPER" if the frequency is too high and "LOWER" if it is too low.

⑤ TAPE 2 MONITOR button

Switch on when using a cassette deck connected to the TAPE 2 MONITOR jacks.

⑥ Input selector buttons

Use to select playback source.
[TAPE 1/DAT] — Press when listening to tape playback with the cassette deck 1 or digital audio tape deck.
[VCR/LD] — Press when listening to programs from a component connected to the VCR/LD terminals.
[CD] — Press when listening to compact disc playback on a CD player.
[TUNER] — Press when listening to AM or FM broadcasts.
[PHONO] — Press when listening to record playback on a turntable.

⑦ MEMORY button

When the unit is in the frequency display mode, pressing this button will result in the memorization of the current broadcast band, reception frequency, and FM AUTO/MONO mode.
This button is also used to input custom memory names.

⑧ MEMORY SCAN button

This button is used for station memory scan and custom memory scan.

⑨ CUSTOM MEMORY buttons

Stations can be assigned to STATION CALL buttons according to the genre of material broadcast (POP, ROCK, OTHER). You can recall a particular genre, and scan all the stations of that genre with Memory Scan until you reach the desired one. (Refer to page 10 and 11 for details concerning memory operation.)

⑩ RETURN button

This is helpful during troubleshooting or when no sound is output. Pressing this button returns the receiver to the following settings, the sound level being controlled by VOLUME control.

- TAPE 2 MONITOR   OFF
- FUNCTION   TUNER
- BAND   FM*

* The last FM broadcast you were listening to will be received. When reception is not possible, search begins for a frequency that can be received.

NOTE:
If no sound is output after the RETURN button is pressed make sure that SPEAKERS switches are turned ON.

⑪ BALANCE control

Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the L position and if the left side is louder, turn toward the R position.

⑫ VOLUME control

Use to adjust volume level.

⑬ TUNING buttons (+ , −)

+: The FM or AM band is scanned in the direction of increasing frequency.
−: The opposite operation to that of the + button takes place.

⑭ BAND buttons

These buttons are used to select either FM or AM reception.
FM: Push this button for FM reception.
AM: Push this button for AM reception.

⑮ TREBLE tone control

Use to adjust high-frequency tone. The center position is the flat (normal) position. When turned to the right, high-frequency tones are emphasized; when turned to the left, high-frequency tones are de-emphasized.
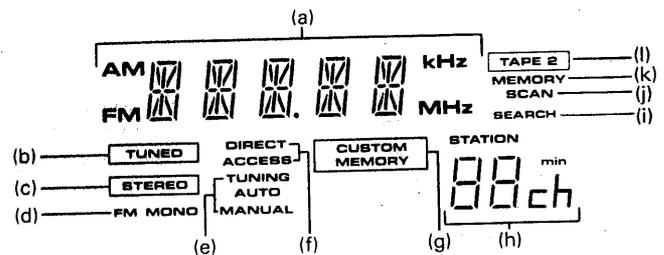
⑯ BASS tone control

Use to adjust the low-frequency tone. The center position is the flat (normal) position. When turned to the right, low-frequency tones are emphasized; when turned to the left, low-frequency tones are de-emphasized.

⑰ STATION CALL buttons

These buttons are used to preset and recall desired broadcasting stations.

⑱ OPERATION DISPLAY panel

(a) Indicates the function or frequency by the function switches.
(b) TUNED indicator
(c) FM STEREO indicator
(d) FM MONO indicator
(e) TUNING AUTO/MANUAL indicator
(f) DIRECT ACCESS tuning indicator
(g) CUSTOM MEMORY indicator
(h) Indicates channel, STATION CALL number or sleep time.
(i) SEARCH indicator
(j) SCAN indicator
(k) MEMORY indicator
(l) TAPE 2 monitor indicator.

⑲ HITS (Hyper Intelligent Tuning System) button

Press this button to automatically search for and tune in broadcasts that can be received. (Refer to page 9.)

⑳ FM TUNING AUTO/MANU button

Works during FM reception.
Use this button to select either the AUTO mode or the MANUAL mode. When the "AUTO" indicator is lit, the receiver is in the AUTO mode (see this page 8).

㉑ Remote sensor window (SX-221R only)

㉒ FM MODE AUTO/MONO selector button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator is lit.

Auto stereo mode:
Normally leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo sound.
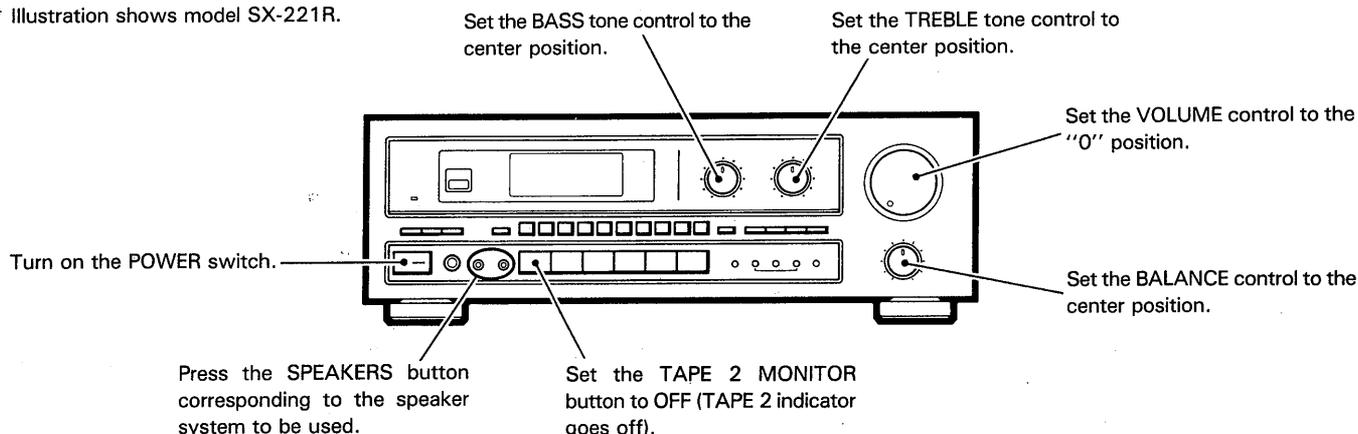
Monaural mode:
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise, however, FM stereo broadcasts will be then reproduced in monaural sound.

NOTE:
This button has no effect on reception of AM broadcasts.

SETTING THE UNIT PRIOR TO OPERATION

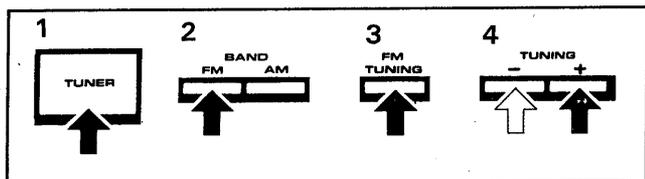- Before operating the unit, be sure to set it as shown below.

* Illustration shows model SX-221R.

Set the BASS tone control to the center position.

Set the TREBLE tone control to the center position.

Set the VOLUME control to the "0" position.

Turn on the POWER switch.

Set the BALANCE control to the center position.

Press the SPEAKERS button corresponding to the speaker system to be used.

Set the TAPE 2 MONITOR button to OFF (TAPE 2 indicator goes off).

LISTENING TO A BROADCAST

- Check that all terminals are properly connected before switching on the unit.
- Be sure to turn the TAPE 2 MONITOR button OFF when listening to AM or FM broadcasts.

AUTO TUNING (FM reception)

The electronic tuning circuit inside the unit will search for the station.

1. **Press the TUNER button of the input selector buttons.**
2. **Set the BAND selector buttons for FM reception.**
3. **Press the FM TUNING AUTO/MANU button to establish the AUTO tuning mode (the AUTO indicator lights).**
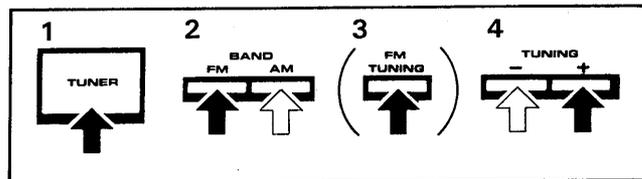4. **Press the TUNING buttons "+" or "–" for a higher or lower frequency as desired.**

   The frequency will change rapidly during scanning. The AUTO TUNING will stop automatically when the station is located and the TUNED indicator will light up.

NOTE:
When the AUTO TUNING is in use, reception may not be possible over long distances or when signals are weak. At these times manual tuning is recommended.

5. **Adjust the volume with the VOLUME control and the tone with TREBLE tone control and BASS tone control.**

MANUAL TUNING (FM/AM reception)

1. **Press the TUNER button of the input selector buttons.**
2. **Select your desired broadcasting band using the BAND selector buttons.**
3. **Press the FM TUNING AUTO/MANUAL button to establish the MANUAL tuning mode (the MANUAL indicator lights) during FM reception.**
4. **Use the TUNING buttons to locate the frequency of the desired station.**

   For step-by-step searching, press the TUNING button once and release it immediately. For continuous rapid scanning keep the TUNING button pressed. The TUNED indicator will light up when the station is tuned in best.

NOTE:
The TUNED indicator will not function for broadcasts received over long distances or when signals are weak.

5. **Adjust the volume with the VOLUME control and the tone with TREBLE tone control and BASS tone control.**

DIRECT ACCESS TUNING

LISTENING TO BROADCASTS USING DIRECT ACCESS TUNING

When you know the frequency of the desired station, the frequency can be input directly using the STATION CALL (number) buttons in the following way:
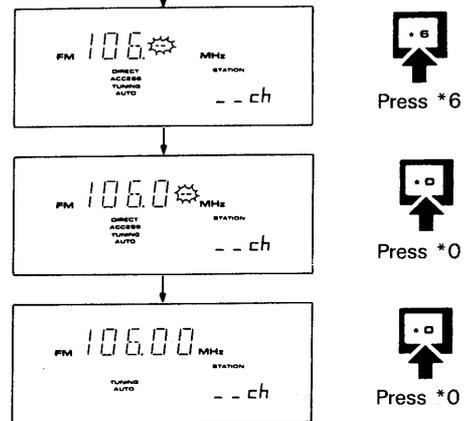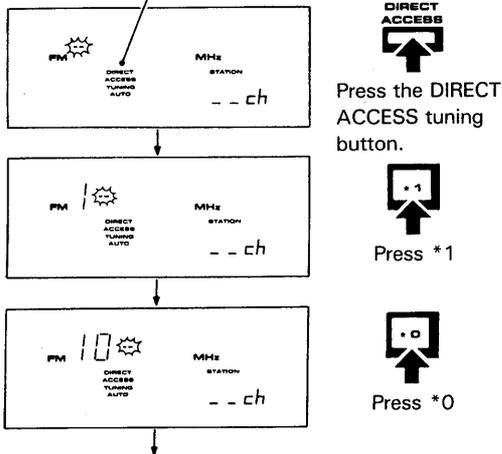
NOTE:
Be sure to turn the TAPE 2 MONITOR button OFF when listening to AM or FM broadcasts.

1. **Press the TUNER button of the input selector buttons.**
2. **Select either FM or AM using the BAND selector buttons.**
3. **Press the DIRECT ACCESS tuning button.**
   - In the Direct Access tuning mode, the DIRECT ACCESS tuning indicator will light up.
4. **Input the desired station frequency using the STATION CALL buttons.**

   Example 1: To receive FM 106.00 MHz

   DIRECT ACCESS tuning indicator lights up

   Press the DIRECT ACCESS tuning button.

   Press *1

   Press *0

   Press *6

   Press *0

   Press *0

Once the station frequency has been input, the receiver tunes in that frequency. If the input frequency falls below the lower or upper limit of the receiver's receivable frequency range (FM: 87.5 MHz — 108 MHz; AM: 531 kHz — 1,602 kHz) "LOWER" or "UPPER" is displayed, indicating that the frequency which has been input cannot be tuned in.

5. **Adjust the sound volume and tone as desired.**

To cancel frequency input

Direct access is canceled when the DIRECT ACCESS tuning button is pressed again.
Under the following conditions direct access is canceled and the unit returns to the condition in effect before direct access was selected:
① If there is no key input for about five seconds after the DIRECT ACCESS tuning button was pressed.
② If more than about eight seconds elapse between numbers input.

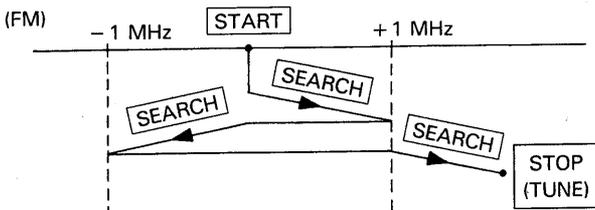# HITS (Hyper Intelligent Tuning System)

- Works during FM reception.
- If the HITS button is pressed during input of numbers for DIRECT ACCESS tuning, the receiver sets the remaining digits which have not yet been input to "0," searches for the corresponding frequencies, and stops on the first station it finds.
- If the HITS button is pressed at the currently displayed station frequency, the receiver searches up and down the frequency band for the next station (the SEARCH indicator in the display section lights at this time) and stops at the first one it finds.

NOTE:
- *The system searches for stations within successive 1 MHz ranges for FM. During DIRECT ACCESS tuning, it searches up and down for a station until it reaches the edges of the band. If no receivable station is found within the band range, the receiver returns to the state it was in before the HITS button was pressed.*
- *If the upper (or lower) frequency limit of the receiver is encountered during HITS operation, the receiver stops searching in that direction but continues to search in the other.*

(FM)

-1 MHz   START   +1 MHz

SEARCH
SEARCH
SEARCH
STOP (TUNE)

9
<ARB1369>

PRESET TUNING

FREQUENCY PRESETTING

Allows three stations per STATION CALL button (press once, twice, or three times to select).

1. Set the BAND selector buttons to either FM or AM.

2. Tune in the desired station.

- See the section "DIRECT ACCESS TUNING" for information on reception using the Direct Access Tuning mode.
- See the section "AUTO TUNING" for information on reception using the Auto Tuning mode.
- See the section "MANUAL TUNING" for information on reception using the Manual Tuning mode.
  In addition to station frequencies, the FM MODE (AUTO/MONO) can also be preset.

3. Press the MEMORY button.

4. Press the STATION CALL button into which you wish to preset the station.

- Press the STATION CALL button while the MEMORY indicator is flashing (about 5 seconds).
- Use the STATION CALL buttons (0 through 9) to select a preset channel. One press selects the 1 – 10 range, two presses 11 – 20, and three presses 21 – 30.
  [Example] If you press button $\boxed{*3}$:
  Once – STATION 3
  Twice – STATION 13
  Three times – STATION 23
  Press a STATION CALL button within two seconds.
  When the display stops flashing, the station is preset.

NOTE:
Do not press buttons while the display is still flashing.

5. Repeat steps 1 to 4 to preset additional stations.

A total of 30 AM and FM stations may be preset. When you store a new preset, it takes the place of the previously stored station (if any).

LISTENING TO BROADCASTS USING PRESET TUNING

1. Press the STATION CALL button into which the desired station has been preset.

- When the function button is set to a function other than TUNER, it will switch to the TUNER function automatically if one of the STATION CALL buttons is pressed.
  Tuning can be performed simply and accurately following the above procedure.

2. Adjust the volume and tone as desired.

- Make sure that TAPE 2 MONITOR button is turned on when using an audio adaptor component (graphic equalizer, etc.) connected to the TAPE 2 MONITOR jacks.

NOTE:
The contents of the STATION CALL buttons will be retained for several days, even if the receiver power cord is unplugged.
If a preset station has been erased, preset it again.

Last station memory

The last received AM and FM stations remain stored despite input selector and/or POWER switching. To recall, use BAND selector buttons.

HOW TO USE THE CUSTOM MEMORY

Preset stations can be classified into as many as three different genres according to the material played by the station. Each of these three genres can be given a name, and Memory Scan of all the stations of a particular genre can be carried out.
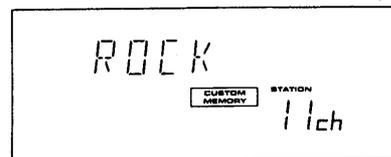The initial STATION CALL numbers are classified and named as follows.

STATION CALL NO.	Name
1 – 10	POP
11 – 20	ROCK
21 – 30	OTHER

It is recommended that you assign STATION CALL buttons to appropriate stations to be preset.
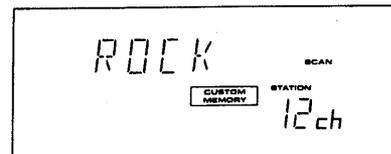
Memory Scan of stations with the same genre name

Memory Scan of all stations classified under the same genre name is possible.

1. Press the CUSTOM MEMORY button to display the name (POP, ROCK, OTHER) you want to Memory Scan.
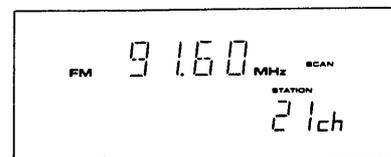

2. Press the MEMORY SCAN button.

- Memory Scan of stations classified under the name displayed will be carried out.
- Press the MEMORY SCAN button again to stop Memory Scan.

Memory Scan of all the station call numbers

You can recall all of the station call numbers by pressing the MEMORY SCAN button while the display shows the frequency indication.
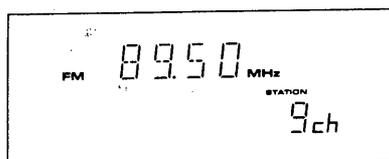

Press the MEMORY SCAN button again to stop Memory Scan.

Reclassification of a station under a different genre name

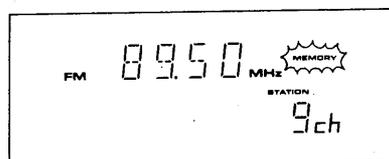It is possible to change the genre classification of a station.

[Example] When you want to change the classification of the station assigned to STATION CALL number 9 from "POP" to "OTHER".

1. Press the STATION CALL 9 button.

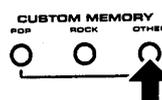• The station assigned to STATION CALL number 9 will be recalled.

2. Press the MEMORY button.

• The MEMORY indicator will flash.

3. Press the OTHER button.

• The "OTHER" will flash.

• When the display stops flashing, the classification name of STATION CALL number 9 change to "OTHER".

NOTE:
Do not press buttons while the display is still flashing.

How to Cancel CUSTOM MEMORY

1. Press the STATION CALL number that you wish to cancel.

2. Press the MEMORY button.

• The MEMORY indicator will flash.

3. While the MEMORY indicator is flashing, press twice on one of the three CUSTOM MEMORY buttons.

• The display will show "TUNER". This completes cancellation.

NOTE:
Do not press buttons while the display is still flashing.

TO LISTEN TO OTHER MUSIC SOURCES

1. Turn on the power to the stereo components you wish to use.
2. Use the input selector buttons and tape monitor switches as appropriate to select the desired program source.

3. Operate the appropriate stereo component to play back the program source.
4. Adjust the volume with the VOLUME control, and the tone with TREBLE tone control and BASS tone control.

	Input selector button	TAPE 2 MONITOR button
To listen to a tape on the cassette deck connected to TAPE 2 MONITOR jacks	—	ON
To listen to the component connected to VCR/LD jacks	VCR/LD	OFF
To listen to a CD	CD	OFF
To listen to records	PHONO	OFF
To listen to TAPE 1/DAT	TAPE 1/DAT	OFF

TAPE RECORDING

[For a cassette deck]

You can record an FM or AM broadcast, or a sound source connected to the VCR/LD, CD, PHONO jacks.

1. **Select the sound source to be recorded.**
2. **Operate the cassette deck connected to the TAPE 1/ DAT or TAPE 2 MONITOR jacks.**
3. **Turn on (or start) the sound source to be recorded.**

- For details on operating the cassette deck, refer to your cassette deck's operating instructions.
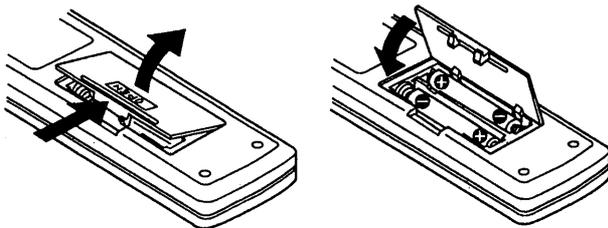
COPYING TAPES

[When using two cassette decks]

When two cassette decks are used, the sound played back on the deck connected to the TAPE 1 /DAT jacks can be recorded on the deck connected to the TAPE 2 MONITOR jacks;
- To make a tape copy with contents identical to the original tape.
- To edit a recording of an FM broadcast in order to cut out unwanted commercials, recording only the desired material onto another tape.

1. **Load the playback tape (i.e. the pre-recorded tape) in the deck connected to the TAPE 1/DAT jacks, and the tape to be recorded in the other deck connected to the TAPE 2 MONITOR jacks.**
2. **Press the TAPE 1/DAT button.**
3. **Operate the cassette decks to begin copying.**

Set the cassette deck with the non-recorded tape to the recording mode and set the cassette deck with the original tape to the playback mode.

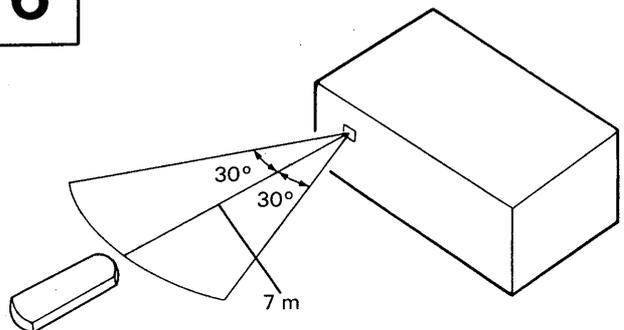# REMOTE CONTROL OPERATION (SX-221R ONLY)

LOADING BATTERIES
(See Fig 5)

Open the battery compartment cover on the back of the remote control unit.
Insert size "AAA" [IEC R03 (UM-4)] dry cell batteries into the battery compartment in accordance with the indications ($\oplus$, $\ominus$) inside the compartment.
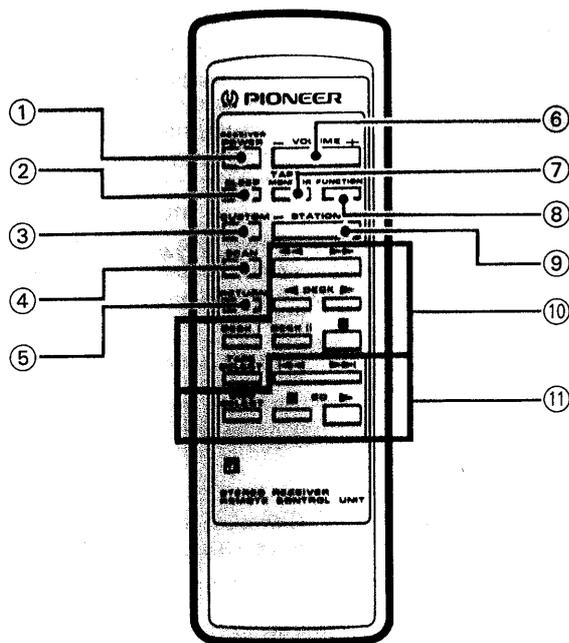Close the cover of the battery case.

Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

A.
Always insert batteries into the battery compartment correctly matching the positive (+) and negative (−) polarities, as indicated inside the compartment.
B.
Never mix new and used batteries.
C.
Batteries of the same size may have different voltages, depending on their type. Do not mix different types of batteries.

REMOTE CONTROL RANGE
(See Fig 6)

When operating the remote control unit, point the front of the unit at the front panel of the receiver. The remote control unit may be used within a range of about 7 meters from the remote sensor, within angles of up to about 30 degrees.
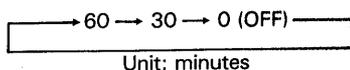
The remote control unit can be used to operate some functions of Pioneer 🔲 marked CD players and cassette deck.

① RECEIVER POWER button

② SLEEP button

Activates the SLEEP timer. The length changes in the following manner each time the button is pressed.

```
┌──→ 60 ──→ 30 ──→ 0 (OFF) ──┐
└─────────────────────────────┘
        Unit: minutes
```

During SLEEP timer operation, SLEEP is displayed on the receiver OPERATION DISPLAY.

③ CUSTOM button

For selection of one of three custom memory settings.

④ SCAN button
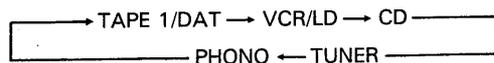
Scans memorized stations.

⑤ RETURN button

⑥ VOLUME + /– button

⑦ TAPE 2 MONITOR button

⑧ FUNCTION button

Use to select playback source.
The function changes in the following manner each time this button is pressed.

```
┌──→ TAPE 1/DAT ──→ VCR/LD ──→ CD ──┐
└──────── PHONO ←── TUNER ──────────┘
```

⑨ STATION + /– button

Before operation, memorize broadcast stations in the STATION CALL buttons. (See page 10.)
+ : Station change in order in the upward direction.
– : Station change in order in the downward direction.

⑩ DECK operation button

TAPE SELECT: Cassette selection. (When MULTI-CASSETTE CHANGER is used.)
DECK I: DECK I selection
DECK II: DECK II selection
■:   Stop
◄DECK►:   Reverse and Forward playback (Set the function button to TAPE position.)
◄◄:   Rewind in forward mode, fast forward in reverse mode.
►►:   Fast Forward in forward mode, rewind in reverse mode.

NOTE:
* To operate the cassette deck, first press the Deck I or Deck II button to select the desired deck. Then press the correct control buttons.
* To operate the single deck, first press the Deck II button. Then press the correct control buttons.
* Refer to your cassette deck's operating instructions for details.

⑪ CD operation button

DISC SELECT: DISC selection
■:   Stop
►:   Play
I◄◄, ►►I: Track search

NOTE:
Note that the DISC SELECT button on the accessory remote control unit may not function, depending on the CD player used.

Refer to each operating instructions about the Cassette deck-, or CD-control.

13

<ARB1369>

HINTS FOR BETTER RECEPTION

EXTERNAL FM ANTENNA

The main advantage of FM over AM is the quality of the broadcast signal. In order to benefit fully from the high signal quality of FM broadcasts, it is recommended that a special-purpose FM antenna be installed. In weak signal areas, a multi-element (3 element, 5 element, 7 element, etc.) antenna should be used.

FM OUTDOOR ANTENNA CONNECTIONS
If an FM antenna has already been erected outdoors, connect it, referring to the figure.

GROUNDING

Grounding is recommended if reception of FM programs is impaired by noise. To ground, connect a thick polyvinyl insulated wire to the GND terminal and attach the other end to a metal water pipe or grounding bar or wind it around a copper plate and bury it.

NOTE:
Never connect a wire to a gas pipe for grounding since sparks may ignite the gas.

EXTERNAL AM ANTENNA

If it is not possible to obtain adequate AM reception even by changing the orientation of the AM loop antenna, a separate indoor antenna, or an outdoor antenna should be installed.

INDOOR AM ANTENNA
Use a vinyl-insulated wire (5 — 6m) and connect one end to the AM antenna terminal and affix the other end to the wall or ceiling, as high as possible.
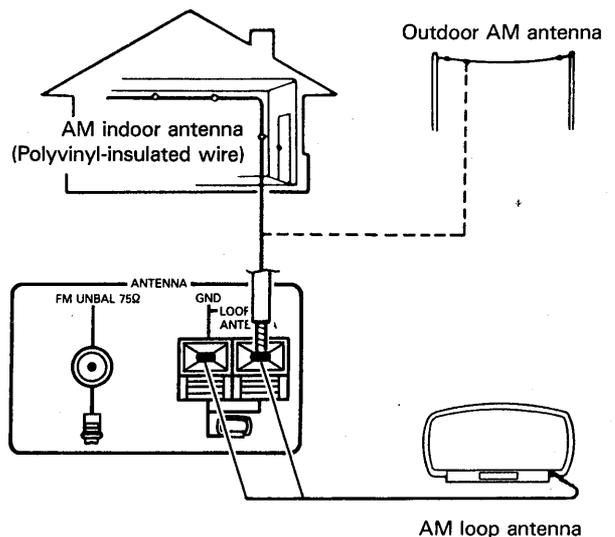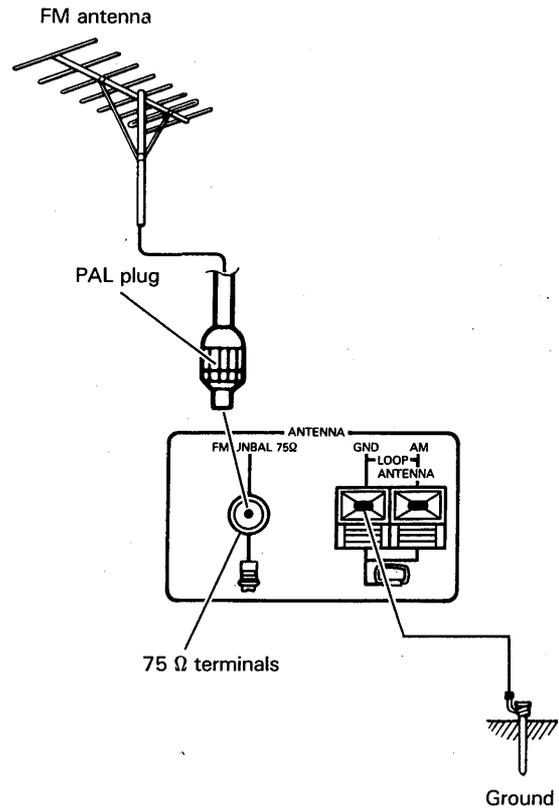
OUTDOOR AM ANTENNA
If reception quality is not improved sufficiently even when an indoor antenna is used, a vinyl-insulated wire should be installed outside and fixed in place.

NOTE:
Do not detach the AM loop antenna when using an indoor or an outdoor AM antenna.

Connecting the coaxial cable

FM antenna

PAL plug

75 Ω terminals

Ground

Outdoor AM antenna

AM indoor antenna
(Polyvinyl-insulated wire)

AM loop antenna

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
Power does not come on even when POWER switch is pressed.	• Power cord is disconnected.	• Connect cord securely.
Control was not possible regardless of what operation switch was pressed.	• Static electricity affected the unit when the air was dry, such as in winter.	• Unplug the power cord of the unit from the AC wall outlet, then plug it in again. • If static electricity is pronounced, it is recommended that you operate the unit using the remote control unit.
No sound is produced, even when Function switch is selected.	• VOLUME control is set to 0 (MIN). • Speaker connecting wires are disconnected from speaker terminals. • One or both of the input cords are disconnected. • TAPE 2 MONITOR button is in the ON position.	• Turn the VOLUME control toward the right. • Connect wires to terminals securely. • Connect the input cords securely. • Press the button to the OFF position.
Sound is produced from one speaker only.	• BALANCE control is set too far to one side or the other. • One of the speaker connecting wires or input cords is disconnected.	• Set BALANCE control to center position. • Connect the wires and cords securely.
Noise is produced during reception of AM broadcasts when the power switch of other components is turned ON or OFF.	• AM loop antenna picks up electrical noise created by switch contacts.	• Place the AM loop antenna as far away as possible from this and other components.
High noise level.	• Station has not been tuned in to correct frequency. • Antenna has not been connected or has become disconnected. **FM reception** • Accessory T-type antenna remains bundled up or it is not pointing in the right direction. • Weak broadcasting station signals. • Noise picked up from other equipment (or, in particular, from passing automobiles). • Multipath results when signals from broadcasting station entering antenna directly are mixed with signals which have been reflected by mountains or high buildings on their way to the antenna. This results in distorted sound and noise. **AM reception** • AM antenna not pointing in the right direction. • Weak broadcasting station signals. • Noise is being picked up from other equipment (especially electrical appliances using motor or fluorescent lights).	• Tune the station correctly • Connect the antenna securely. • Stretch both ends of antenna taut and locate the direction yielding optimum reception. • Replace accessory T-type antenna with outdoor FM antenna. • Try altering direction and mounting position of antenna. If an outdoor antenna has been erected, place it as far as possible from passing traffic. • Change AM antenna's direction and find a position where reception is improved. • Erect outdoor AM antenna or connect ground wire. • Stop using appliances generating noise or remove them from vicinity of the stereo equipment.
No auto stop. (FM reception)	• Input signals are not strong enough.	• If a T-type antenna is being used, change over to an outdoor antenna. • Perform manual tuning.
Remote control does not work. (SX-221R only)	• Batteries are dead or no batteries in remote control unit. • Poor angle or too great a distance from the remote sensor window. • There is an obstacle between you and the remote sensor window. • A fluorescent light is shining on the remote sensor window.	• Insert new batteries. • Use within 7 meters and within a 30 degree angle of the remote sensor window. • Change your position or move the obstacle. • Move so fluorescent light does not shine directly on front panel remote sensor window.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.