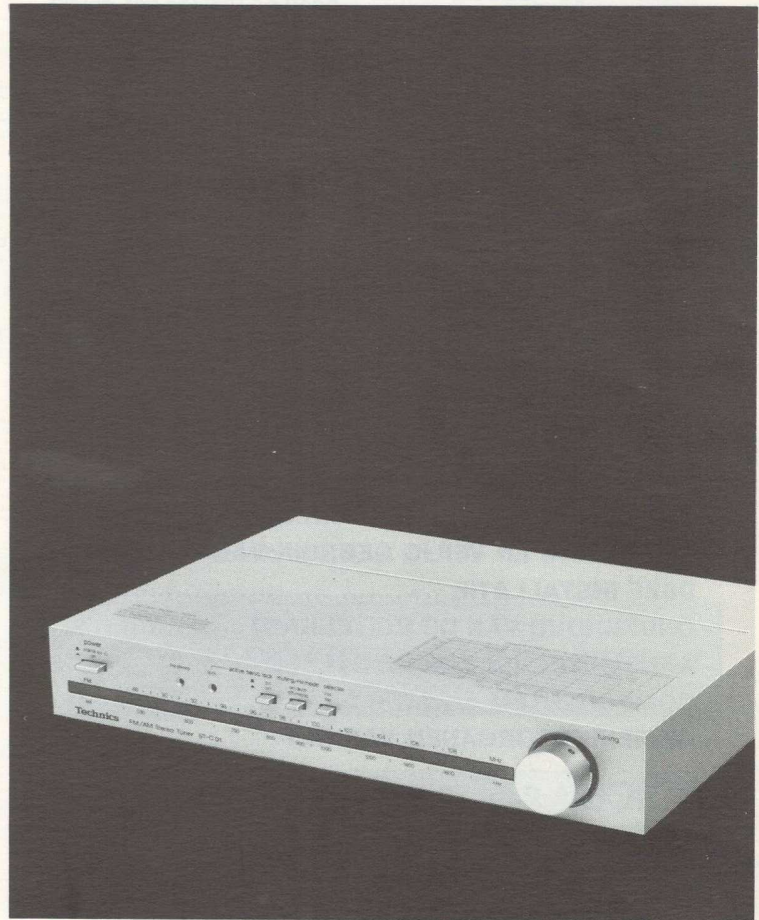


Technics

FM/AM Stereo Tuner

ST-C01 ST-C01K

OPERATING INSTRUCTIONS



ST-C01K is different in appearance and color-tone.

Before operating this unit, please read these instructions completely

CONTENTS

• FOR UNITED KINGDOM	2
• FOR AUSTRALIA	2
• BEFORE USING THIS UNIT	2
• ACCESSORIES	2
• FOR SAFE USE OF THIS UNIT	2
• MAINTENANCE OF EXTERNAL SURFACES	3
• STEREO SYSTEM COMPONENTS AND THEIR CONNECTIONS	4

INHALT

• VOR DER INBETRIEBNAHME	11
• ZUBEHÖR	11
• FÜR EINEN LANGEN BETRIEB DIESES GERÄTES	11
• WARTUNG	12
• STEREO-SYSTEMKOMPONENTEN UND IHRE ANSCHLÜSSE	13
• BEDIENUNGSELEMENTE AN DER	

TABLE DES MATIERES

• AVANT LE FONCTIONNEMENT	20
• ACCESSOIRES	20
• POUR PERMETTRE UNE UTILISATION PLUS SURE DE CET APPAREIL	20
• ENTRETIEN DES SURFACES EXTERNES	21
• ELEMENTS DU SYSTEME STEREO ET LEURS BRANCHEMENTS	22

INHOUD

• VOOR HET IN GEBRUIK NEMEN	29
• TOEBEHOREN	29
• VOOR LANG EN VEILIG GEBRUIK VAN DEZE INSTALLATIE	29
• ONDERHOUD VAN DE BUITENKANT	30
• AANSLUITINGEN VAN DE STEREO COMPONENTEN	31
• BEDIENINGSORGANEN VAN HET	

INDICE

• ANTES DE HACER FUNCIONAR EL APARATO ...	38
• ACCESORIOS	38
• PARA UN USO SEGURO DEL PRESENTE APARATO	38
• MANTENIMIENTO DE LAS SUPERFICIES EXTERNAS	39
• COMPONENTES DEL SISTEMA ESTEREO y CONEXIONES DE LOS MISMOS	40

INNEHÅLL

• INNAN APPARATEN ANVÄNDS	47
• TILLBEHÖR	47
• NÅGRA RÅD FÖR LÄNGRE OCH TRYGGARE ANVÄNDNING	47
• UNDERHÅLL	48
• STEREOUTRUSTNINGENS OLIKA DELAR OCH DERAS ANSLUTNINGAR.....	49

• FRONT PANEL CONTROLS AND THEIR FUNCTIONS	5
• TUNING	6
• LISTENING TO RADIO BROADCASTS	6
• CONNECTION NOTES	7
• TECHNICAL SPECIFICATIONS	8
• TO RAISE THE FRONT	9
• TROUBLESHOOTING GUIDE	9

GERÄTEVORDERSEITE UND IHRE FUNKTIONEN	14
• ABSTIMMUNG	15
• RADIOHÖREN	15
• ANSCHLÜSSE	16
• TECHNISCHE DATEN	17
• ANHEBEN DER GERÄTEVORDERSEITE	18
• LISTE VON FEHLERMÖGLICHKEITEN	18

• COMMANDES DU PANNEAU AVANT ET LEURS FONCTIONS	23
• SYNTONISATION	24
• ECOUTE DES EMISSIONS RADIO.....	24
• NOTES SUR LES BRANCHEMENTS	25
• DONNEES TECHNIQUES	26
• LEVER L'AVANT	27
• GUIDE DU DEPANNAGE	27

VOORPANEEL EN HUN FUNCTIE	32
• AFSTEMMEN	33
• LUISTEREN NAAR RADIO-UITZENDINGEN	33
• AANSLUITINGEN	34
• TECHNISCHE GEGEVENS	35
• HELLEND OPSTELLEN	36
• GIDS VOOR HET VERHELPE VAN STORINGEN	36

• CONTROLES DEL PANEL DELANTERO y SUS RESPECTIVAS FUNCIONES	41
• SINTONIZACION	42
• ESCUCHANDO TRANSMISIONES POR RADIO ...	42
• NOTAS SOBRE LAS CONEXIONES	43
• ESPECIFICACIONES TECNICAS	44
• PARA ALZAR LA PARTE DELANTERA	45
• GUIA PARA LA LOCALIZACION DE LAS FALLAS	45

• FRAMPANELENS KONTROLLER OCH DERAS FUNKTINER	50
• STATIONSINSTÄLLNING	51
• LYSSNING PÅ RADIOSÄNDNING	51
• ANSLUTNINGAR TILL ANTENN.....	52
• TEKNISKA DATA	53
• HÖJNING AV FRONTEN	54
• FELSÖKNINGSSCHEMA	54

Dear Stereo Fan

We want to thank you for selecting this product and to welcome you to the growing family of satisfied Technics product owners around the world. We feel certain you will get maximum enjoyment from this new addition to your home.

FOR UNITED KINGDOM

■ Important

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 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.

FOR AUSTRALIA

■ For your safety

To ensure safe operation the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities.

The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.

Please read these operating instructions carefully, and be sure to keep them handy for convenient reference.

BEFORE USING THIS UNIT

Use a minus (-) screwdriver to set the voltage selector (on the bottom panel) to the voltage setting for the area in which the set will be used.

Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries; the correct voltage is already set.)

VOLT ADJ

CAUTION: BE SURE TO UNPLUG
THE POWER SUPPLY CORD BEFORE
SETTING THE VOLTAGE ADJUST
SWITCH.

SQX4689



ACCESSORIES

- FM indoor antenna 1
- Stereo pin-type cord 1

FOR SAFE USE OF THIS UNIT

1) USE AN ORDINARY HOUSEHOLD AC POWER SOURCE

■ Use from an AC power source of high voltage, such as for air conditioners, is very dangerous.

Be extremely careful not to make a connection to the electrical outlet for a large air conditioner or central-heating unit which uses high voltage, because there is the possibility of fire.

■ A DC power source cannot be used.

Be sure to check the power source carefully, especially on a ship or other place where DC is used.



2) CONNECTION AND DISCONNECTION OF THE POWER CORD PLUG

Wet hands are dangerous.

A dangerous electric shock may result if the plug is touched by wet hands.

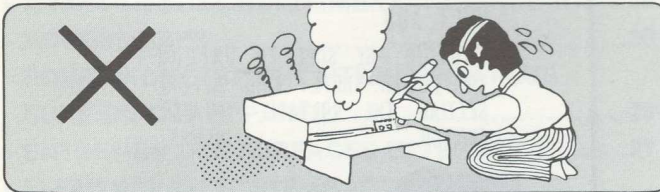
Don't pull the power cord.

Always grasp the plug; never pull the cord itself.



3) NEVER ATTEMPT TO REPAIR OR RECONSTRUCT THIS UNIT

A serious electric shock might occur if this unit is repaired, disassembled or reconstructed by unauthorized persons, or if the internal parts are accidentally touched.



4) FOR FAMILIES WITH CHILDREN

Never permit children to put anything, especially metal, inside this unit. A serious electric shock or malfunction could occur if articles such as coins, needles, screwdrivers, etc. are inserted into this unit.



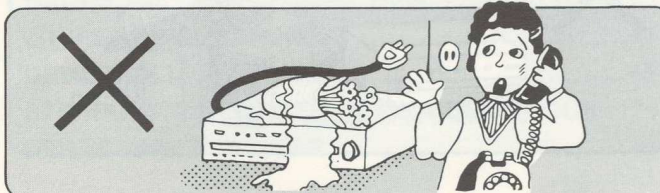
5) TURN OFF AFTER USE

If the unit is left for a long time with the power on, this will not only shorten its useful operation life, but may also cause other unexpected trouble.



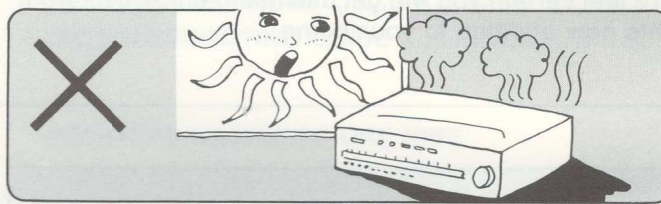
6) IF WATER IS SPILLED ON THE UNIT

Be extremely careful if water is spilled on the unit, because a fire or serious electric shock might occur. Immediately disconnect the power cord plug, and consult with your dealer.



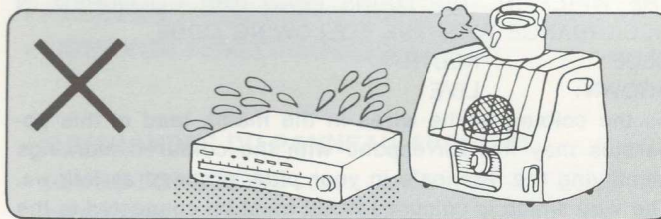
7) PLACE THE UNIT WHERE IT WILL BE WELL VENTILATED, AND AWAY FROM DIRECT SUNLIGHT

Place this unit at least 10 cm (4") away from wall surfaces, etc., and away from direct sunlight.



8) KEEP THE UNIT AWAY FROM STOVES, ETC.

Heat can damage the external surfaces as well as internal circuits and components.



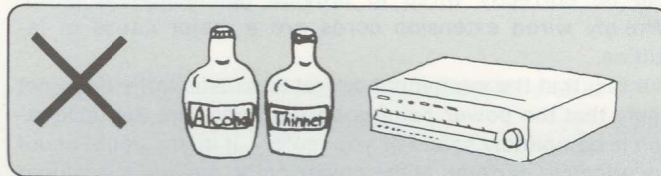
9) AVOID SPRAY-TYPE INSECTICIDES

Insecticides might cause cracks or "cloudiness" in the cabinet and plastic parts of this unit. The gas used in such sprays might, moreover, be ignited suddenly.



10) NEVER USE ALCOHOL OR PAINT THINNER

These and similar chemicals should never be used, because they may damage the finish.



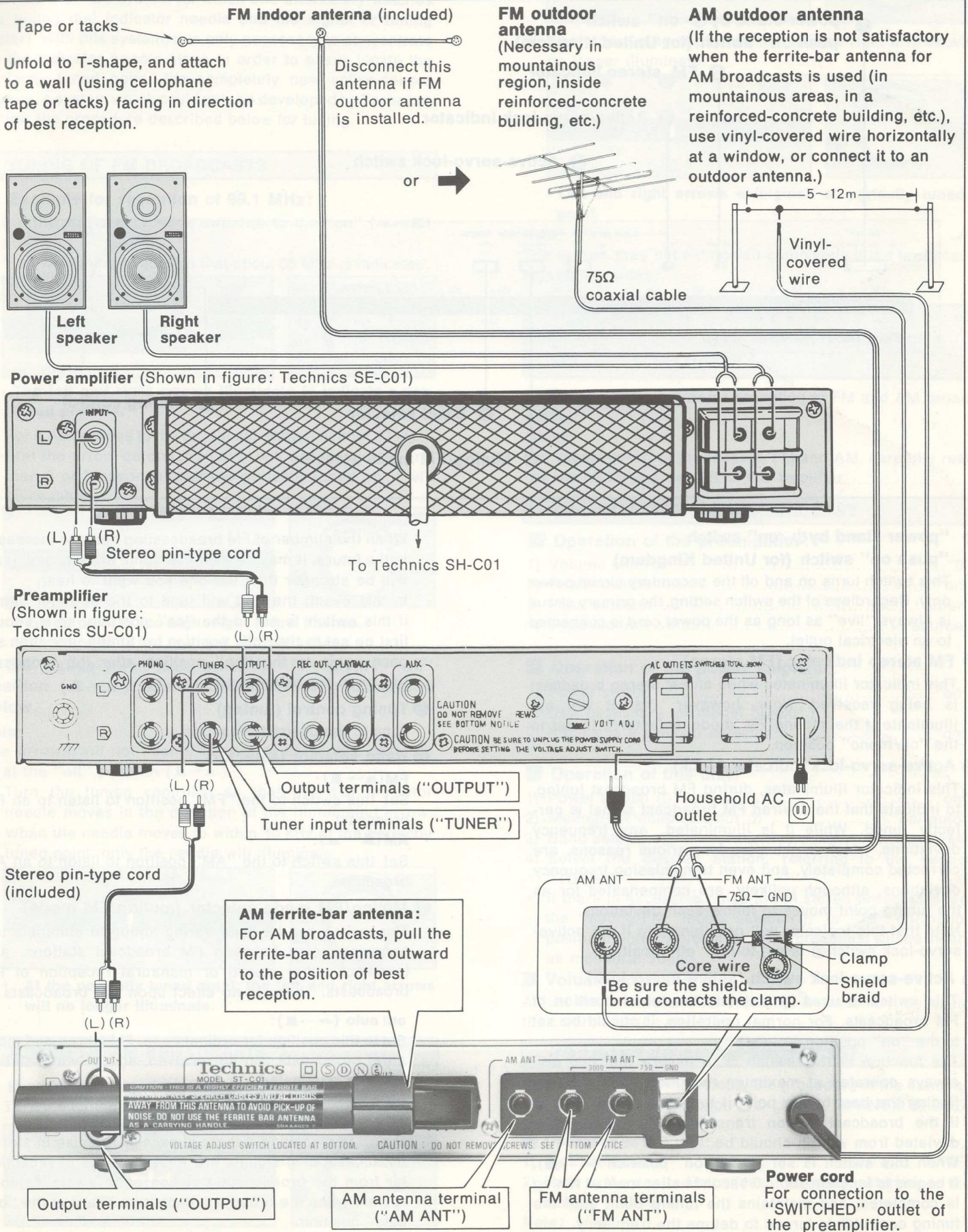
IF TROUBLE OCCURS

If, during operation, the sound is interrupted or indication lamps no longer illuminate, or if abnormal odor or smoke is detected, immediately disconnect the power cord plug, and contact your dealer or an Authorized Service Center.

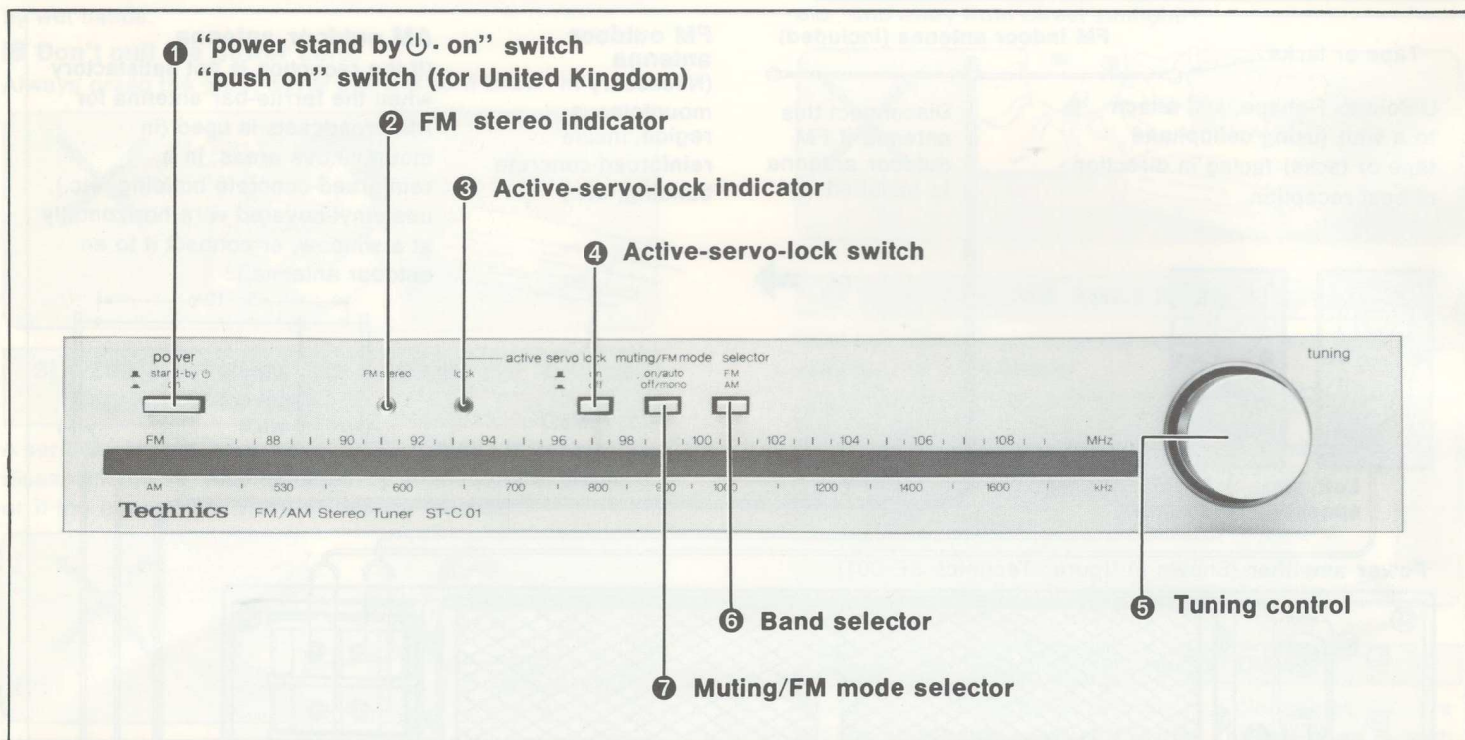
MAINTENANCE OF EXTERNAL SURFACES

To clean, use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth soaked in a detergent (such as used for washing dishes; diluted to 1/5 or 1/6 strength), and then wring the cloth well. Wipe once again with a soft, dry cloth.

STEREO SYSTEM COMPONENTS AND THEIR CONNECTIONS



FRONT PANEL CONTROLS AND THEIR FUNCTIONS



1 "power stand by" switch

"push on" switch (for United Kingdom)

This switch turns on and off the secondary circuit power only. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

2 FM stereo indicator (FM stereo)

This indicator illuminates when an FM stereo broadcast is being received. Note, however, that it will not illuminate if the muting/FM mode selector 7 is set to the "off/mono" position.

3 Active-servo-lock indicator (lock)

This indicator illuminates, during FM broadcast tuning, to indicate that the desired FM broadcast signal is perfectly tuned. While it is illuminated, any frequency deviations, which might arise for various reasons, are corrected completely, and even transmission frequency deviations, although unlikely, are compensated for as the tuning point moves to follow such deviations.

Note that this indicator will not illuminate if the active-servo-lock switch 4 is set to the "off" position.

4 Active-servo-lock switch (active servo lock)

This switch is used to maintain the tuned position of FM broadcasts. For normal operation, it should be set to the "on" position (—→■).

The function of this switch is to assure that this unit always operates at maximum reception capability, by finding the best tuning point if tuning is incomplete or if the broadcast station transmission frequency has deviated from what it should be.

When this switch is set to the "on" position (—→■), it begins to function about 3 seconds after manual tuning is completed, and maintains the tuning point until the tuning control 5 is turned to detune the frequency.

Note that this switch has no effect upon AM broadcasts. To use at the "off" (■→—) position:

When the number of FM broadcasting stations increases in the future, it may happen that some broadcast signals will be stronger than the one you want to hear.

In this event, the unit will tune to the stronger signal if this switch is set to the "on" position, so it should first be set to the "off" position for tuning, and then set once again to the "on" position after the broadcast has been correctly tuned.

5 Tuning control (tuning)

Tune to the desired broadcast.

6 Band selector (selector)

FM (■→■):

Set this switch to the "FM" position to listen to an FM broadcast.

AM (■→■):

Set this switch to the "AM" position to listen to an AM broadcast.

7 Muting/FM mode selector (muting/FM mode)

This switch can be used during tuning to eliminate the annoying noise between FM broadcast stations, and to select either stereo or monaural reception of FM broadcasts. There is no effect upon AM broadcasts.

on/ auto (—→■):

Set to this position for ordinary use. FM stereo and monaural broadcasts can be received, and between-station noise is eliminated.

off/ mono (■→—):

All broadcasts will be received monaurally.

Use at this position if there is excessive noise in stereo broadcasts or if signals are weak because of reception far from the broadcasting station or in a mountainous region, when the broadcast cannot be heard at the "on/ auto" position.

To avoid between-station noise, reduce the setting of the volume control of the amplifier before tuning.

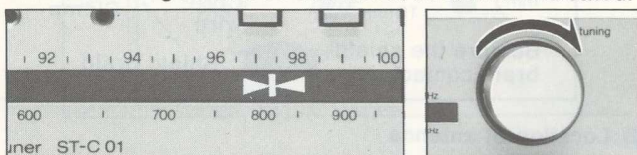
TUNING

The tuning system used for this unit is completely different than the ordinary system (in which one alternately watches the tuning dial indicator needle and the signal or tuning meter). With this system, it is only necessary to concentrate on the indicator needle alone in order to easily locate the perfectly tuned point...the completely new active-sensor system, a system which could only be developed by Technics. Follow the procedure described below for tuning.

TUNING OF FM BROADCASTS

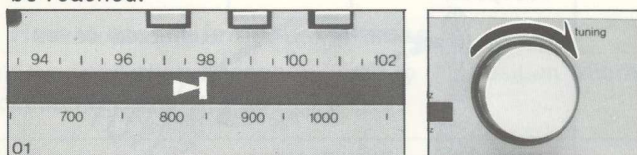
■ Example for reception of 98.1 MHz:

- 1) Set the active-servo-lock switch ④ to the "on" (—→■) position.
- 2) Turn the tuning control so that about 98 MHz is indicated.



• The left and right arrows illuminate to indicate a non-tuned position.

- 3) For a place close to the broadcast station (within 50 kHz), first the arrow on one side only will not illuminate, and then 2 or 3 seconds later the perfectly-tuned point will be reached.



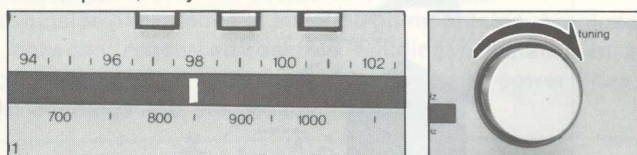
- If tuned point is too high: right arrow flashes.
- If tuned point is too low: left arrow flashes.

If the active-servo-lock switch ④ is at the "off" position (■←—), also follow the steps described below.

Note:

The arrows will not flash if the active-servo-lock switch ④ is at the "off" position (■←—).

- 1) Turn the tuning control ⑤ so that the dial indicator needle moves in the direction of the illuminated arrow.
- 2) When the needle moves to within 10 kHz of the perfectly tuned point, only the needle will illuminate.

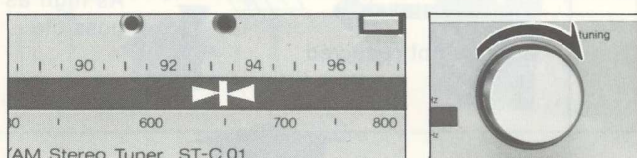


• At the perfectly tuned point, the left and right arrows will no longer illuminate.

TUNING OF AM BROADCASTS

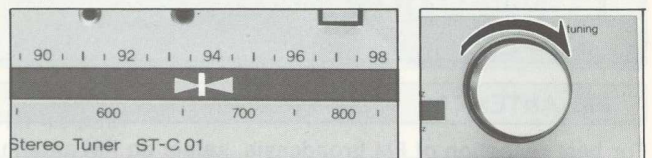
■ Example for reception of 670 kHz:

- 1) Turn the tuning control so that about 670 kHz is indicated.

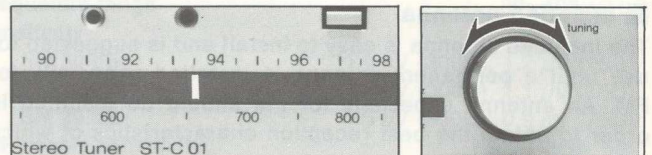


• The left and right arrows illuminate brightly to indicate a non-tuned position.

- 2) When the tuning is close to the broadcast frequency, the brightness of the left and right arrows becomes dimmer.



- 3) When the tuning is perfect, the left and right arrows will no longer illuminate.



• Left and right arrows extinguish at perfectly tuned point.

Note:

The arrows may not extinguish completely if the broadcast signals are weak.

LISTENING TO RADIO BROADCASTS

Follow the steps below for reception of FM and AM broadcasts.

Note:

For reception of all broadcasts, FM and AM, carefully read the operation instructions of the amplifier.

TO LISTEN TO AN FM BROADCAST

■ Operation of the preamplifier:

- 1) Volume control "0".
- 2) Power switch "on".
- 3) Input selector "tuner".
- 4) Tape-monitor switch "source".

■ Operation of the power amplifier:

- 1) Power switch "on".
(Not necessary for model SU-C01.)
- 2) If there is a speaker selector "on".

■ Operation of this unit:

- 1) Power switch ① "on".
- 2) Muting/FM mode selector ⑦ "on/ auto".
- 3) Band selector ⑥ "FM".
- 4) Select the desired station, referring to the section "TUNING".

* If there is excessive noise in FM stereo broadcasts, set the muting/FM mode selector ⑦ to the "off/mono" position. Note, however, that the broadcast will be heard as monaural sound.

■ Volume adjustment:

Adjust the volume and tone quality, if necessary, by using the controls on the amplifier.

TO LISTEN TO AN AM BROADCAST

Except for the following steps, the procedure is the same as that described in the section "TO LISTEN TO AN AM BROADCAST" above.

■ Operation of this unit:

- 1) Band selector ⑥ "AM".
- 2) Tune to the desired broadcast frequency, referring to the section "TUNING".

Note:

The muting/FM mode selector ⑦ has no effect on AM broadcast reception.

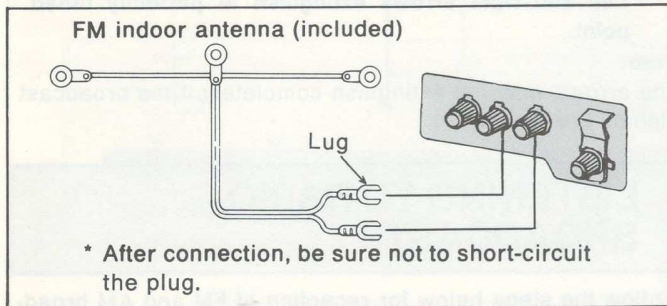
CONNECTION NOTES

FM ANTENNA

For best reception of FM broadcasts, select an FM antenna with the best characteristics for the area in which the unit is to be used.

Included antenna

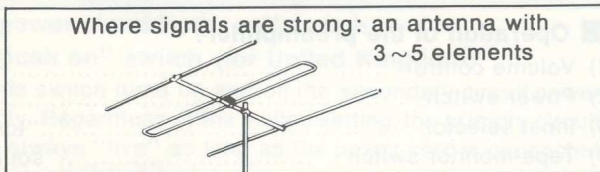
The included antenna is easy to install and is suggested for use until a permanent antenna is installed especially for FM. An antenna especially for FM should be installed in order to obtain the best reception characteristics of which this unit is capable.



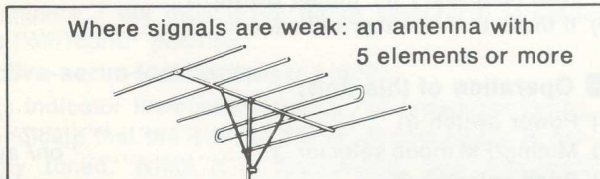
Antenna exclusively for FM reception

1) Selection

1. In areas where very strong broadcast signals are received (where the transmitting antenna can be seen), use an outside antenna with 3~5 elements.



2. In areas where weak broadcast signals are received (in mountainous regions or between tall buildings), use an outside antenna with 5 elements or more.



Note:

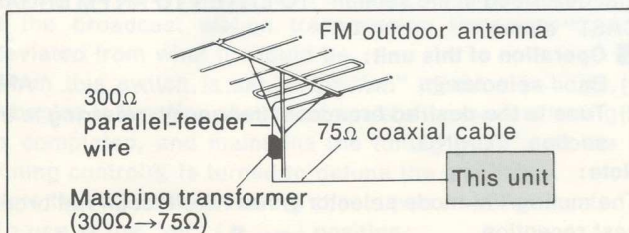
Consult with your dealer for detailed advice concerning the number of elements the antenna should have.

2) Connection wire from the antenna

Two types of wire are most commonly used for connection from the antenna: 300Ω parallel feeder wire and 75Ω coaxial cable. For best resistance to external interference noise, the use of 75Ω coaxial cable is suggested.

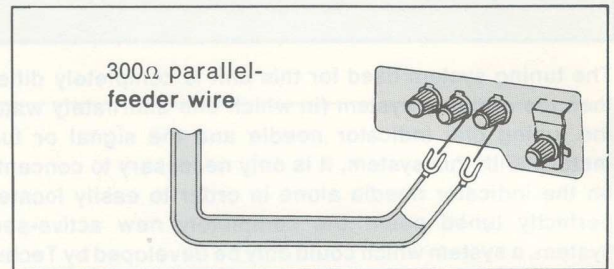
3) Impedance matching

If it is impossible to make a direct connection with 75Ω coaxial cable from the antenna, a matching transformer should be installed, as close to the antenna itself as possible.

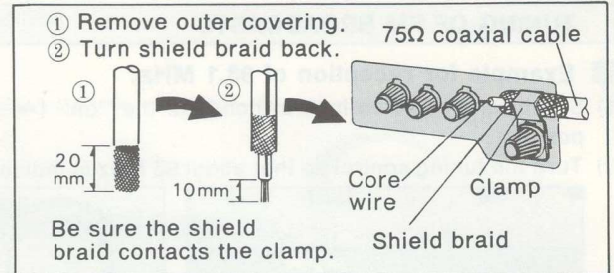


4) Connection

1. If 300Ω parallel feeder wire is used:



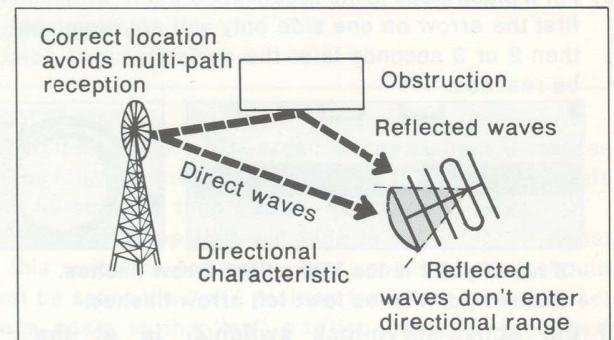
2. If 75Ω coaxial cable is used:



5) Location of antenna

Install the antenna:

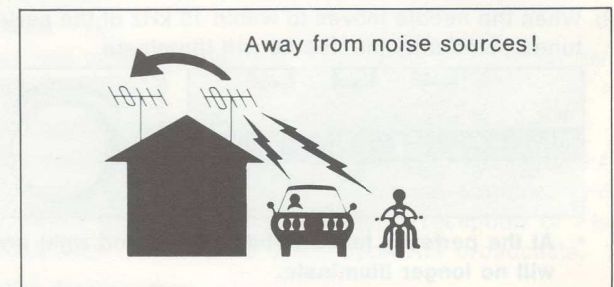
1. Where it will receive FM broadcast signals directly; not in the "shadow" of a building.



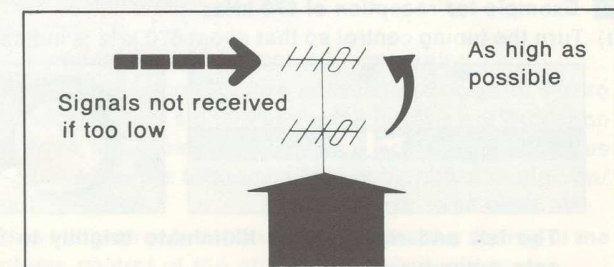
Note:

Multi-path distortion is the distortion which results from the reception of two types of signals: those reflected from nearby buildings, mountains, etc., and those received directly from the broadcasting station.

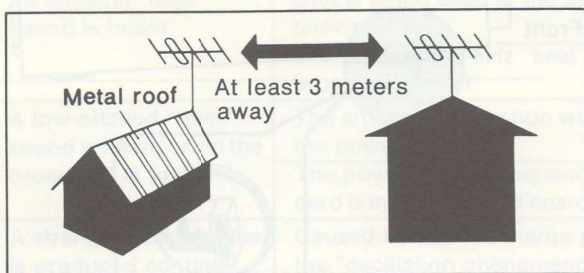
2. Away from busy roads, and away from neon signs.



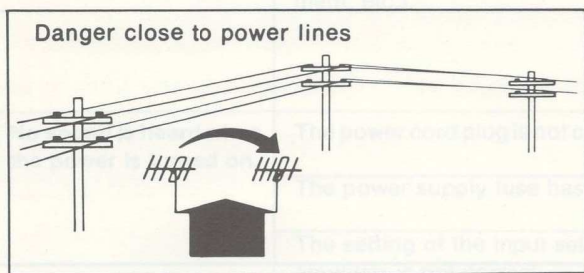
3. At least 4 meters (12 feet) above the ground (except in mountainous regions, etc.).



4. At least 3 meters (10 feet) away from a metal roof or other antennas.



5. To avoid danger, away from electric power lines.



TECHNICAL SPECIFICATIONS

(DIN 45 500)

FM TUNER SECTION

Frequency range	88~108 MHz
Sensitivity	
SN 30 dB	1.9 μ V (300 Ω), 1.2 μ V (75 Ω)
SN 26 dB	1.7 μ V (300 Ω), 1.1 μ V (75 Ω)
SN 20 dB	1.5 μ V (300 Ω), 0.9 μ V (75 Ω)
IHF usable sensitivity	1.9 μ V (IHF '58)
IHF S/N 46 dB stereo quieting sensitivity	20 μ V/75 Ω
Total harmonic distortion	
MONO	0.1%
STEREO	0.15%
S/N	
MONO	68 dB (75 dB, IHF)
STEREO	63 dB (70 dB, IHF)
Frequency response	20 Hz~15 kHz, +0.5 dB~-2 dB 20 Hz~13 kHz, +1.5 dB~-1.5 dB
Alternate channel selectivity	75 dB
Capture ratio	1.0 dB
Image rejection at 98 MHz	50 dB
IF rejection at 98 MHz	85 dB
Spurious response rejection at 98 MHz	75 dB
AM suppression	55 dB
Stereo separation	
1 kHz	45 dB
10 kHz	35 dB
Carrier leak	
19 kHz	-35 dB
38 kHz	-50 dB
	(-37 dB, IHF, 19/38 kHz)
Channel balance (250 Hz~6,300 Hz)	\pm 1.0 dB
Limiting point	1.4 μ V
Bandwidth	
IF amplifier	180 kHz
FM demodulator	1000 kHz
Antenna terminals	300 Ω (balanced) 75 Ω (unbalanced)

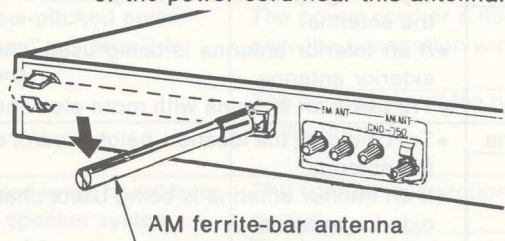
AM ANTENNA

This unit includes a highly sensitive built-in ferrite-bar antenna for AM broadcast reception. No outdoor antenna is necessary unless this unit is used in an area where signals are especially weak.

How to use the ferrite-bar antenna

Pull the ferrite-bar antenna outward to the position where reception is best.

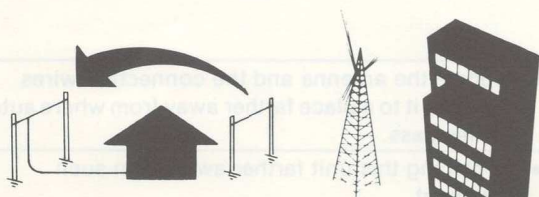
To prevent noise: Do not bring speaker connection wires or the power cord near this antenna.



Connection of an outdoor antenna

If an outside AM antenna is installed (in mountainous regions or between reinforced-concrete buildings), install it in a location away from utility poles, high-voltage power lines, high buildings and busy roads.

Away from utility poles, high-voltage lines, etc.



AM TUNER SECTION

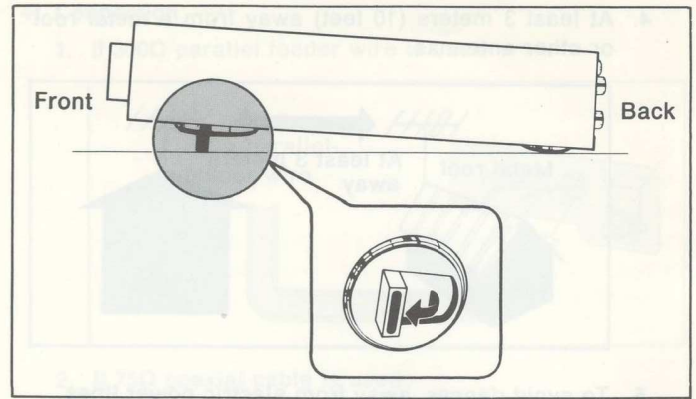
Frequency range	525~1605 kHz
Sensitivity (S/N 20 dB)	30 μ V, 250 μ V/m
Selectivity	30 dB
Image rejection at 1,000 kHz	50 dB
IF rejection at 1,000 kHz	40 dB

GENERAL

Output voltage	fixed 0.5 V
Power consumption	8 W
Power supply	AC 50 Hz/60 Hz, 110V/120V/220V/240V 240 V (for Australia)
Dimensions (W×H×D)	297 × 49 × 255 mm (11-11/16" × 1-15/16" × 10-1/32")
Weight	3.2 kg (7.1 lb)

TO RAISE THE FRONT

The front of this unit can, if desired, be raised for easier operation, by using the feet at the front left and right.




TROUBLESHOOTING GUIDE

Before requesting service for this unit, check this table to determine if the problem can be solved as described below. If the problem still persists after making these checks, or if there are symptoms of malfunction not described in this table, it is recommended that you consult the store where this unit was purchased or your local Service Center (see list included) for further information and assistance.

Note:

The information shown in this table is based upon the use of this unit in combination with the Technics model SE-C01 and SU-C01.

	Problem	Probable cause(s)	Suggested remedy
While listening to FM broadcasts	An unusual hissing noise is heard when listening to the broadcast in stereo, but not heard when listening monaurally.	A slight noise may be heard because the method used for modulation of FM stereo broadcasts is different than that used for monaural broadcasts.	<ul style="list-style-type: none"> Try reducing the treble sound by using the treble tone control of the amplifier. Set the muting/FM mode selector (7) to the "off/mono" position. (Note that the broadcast will then be heard as monaural sound.)
	Noise is excessive in both stereo and monaural broadcasts.	Poor location and/or direction of the antenna. Transmitting station is too far away.	<ul style="list-style-type: none"> Try changing the location, height and/or direction of the antenna. If an interior antenna is being used, change to an exterior antenna. Try using an antenna with more elements.
	The FM stereo indicator flickers, without completely illuminating.	Poor location and/or direction of the antenna. Transmitting station is too far away.	<ul style="list-style-type: none"> Try changing the location, height and/or direction of the antenna. If an interior antenna is being used, change to an exterior antenna. Try using an antenna with more elements.
	Sound is distorted and/or the volume level becomes low.	Broadcast signals are being disturbed. Nearby automobile traffic or airplanes.	
	Excessive noise in stereo broadcasts; sometimes no sound is emitted.	Poor location and/or direction of the antenna. Transmitting station is too far away.	
	Excessive distortion in the sound of stereo broadcasts.	Nearby building or mountain. [Multi-path distortion is being caused by the mutual interference of broadcast signals received directly from the transmitting station (direct waves) and signals being reflected from nearby buildings or mountains (reflected waves).]	
	An unusual "popping" noise is heard when automobiles pass.	Such noise is called ignition noise, and occurs while the automobile engine is running.	<ul style="list-style-type: none"> Relocate the antenna and the connection wires leading to it to a place farther away from where automobiles pass.
	A strange hissing noise is produced continuously or intermittently.	Caused by the "discharge phenomenon" and the "oscillation phenomenon" of electric appliances (such as fluorescent lights, TV, small series-type motors, rectification equipment, etc.).	<ul style="list-style-type: none"> Try placing this unit farther away from such equipment. Install noise-prevention equipment on this unit or on the electric appliance.

	Problem	Probable cause(s)	Suggested remedy
While listening to AM broadcasts	An unusual "beat" sound is heard.	Unit is being used at the same time as the television set.	• Turn off the television set, or use this unit farther away from it.
		Interference (10-kHz "beat") from adjacent broadcast signal.	• Try using the treble tone control of the amplifier to reduce the treble sound.
	A low-pitched "hum" sound is heard when the broadcast is tuned.	The antenna connection wires are too close to the power cord.	• Place the antenna connection wires and the power cord farther apart.
The power supply frequency from the power cord is modulated and heard from the speakers.		• Try reversing the connection of the power cord plug. • Install a special exterior antenna.	
	A strange hissing noise is produced continuously or intermittently.	Caused by the "discharge phenomenon" and the "oscillation phenomenon" of electric appliances (such as fluorescent lights, TV, small series-type motors, rectification equipment, etc.).	• Try placing this unit farther away from such equipment. • Install noise-prevention equipment on this unit or on the electric appliance.
Problems noted at all times	No sound is heard when the power is turned on.	The power cord plug is not completely inserted.	• Confirm that the power cord plug is connected completely.
		The power supply fuse has failed.	• Request the store where this unit was purchased, or a Service Center, to replace the fuse.
		The setting of the input selector of the amplifier is not correct.	• Check to be sure that the selector is set to the correct position.
		The tape-monitor switch of the amplifier is set, incorrectly, to the "tape" position.	• Except for tape playback, set the tape-monitor switch to the "source" () position.
		Headphones are connected.	• Disconnect the headphones from this unit.
	When listening to stereo sound, each sound of the various musical instruments is not heard from its correct position.	The positive (+) and (-) negative connections of the speaker connection wires are reversed.	• Reconnect the speaker connection wires so that the positive and negative connections are correct.
	When listening to stereo sound, the left and right sounds are reversed.	The left and right connections of the speaker connection wires are reversed.	• Check the connections of the speaker connection wires and make them correctly.
		The left and right connections of the connection wires connected to other equipment are reversed.	• Check the connections of the connection wires to other equipment and make them correctly.
	A low-pitched noise ("hum" or "buzz") is heard.	The power cord or a fluorescent light, etc., is near the connection wires.	• Try separating this unit and the electric appliance as far as possible. • Reverse the connection of the power cord plug.
		The connection of the ground wire is incorrect or incomplete.	• Check to be sure that the grounding connection is correct. • If the unit is not grounded, try doing so.
	Sound is not heard from the speaker system on one side.	The speaker connection wires are disconnected.	• Check and correct the connections of the speaker connection wires.
		The balance control of the amplifier is not set to the center position.	• Set the mark on the balance control to the center position.
The volume level for a radio broadcast is different from that for disc play.	The strength of the broadcast signal is not the same as the output from the record player.	• Use the volume control of the amplifier to adjust the volume.	
While listening, sound is suddenly no longer heard. (Indication lamps of other equipment are still illuminated.)	A DC component is mixed with the input. (The protection circuitry of the power amplifier has functioned.)	• Check the connections to other equipment (especially the speaker connection terminals, etc.), and, if still no sound is heard, request service from the store where the unit was purchased or from your local Service Center.	