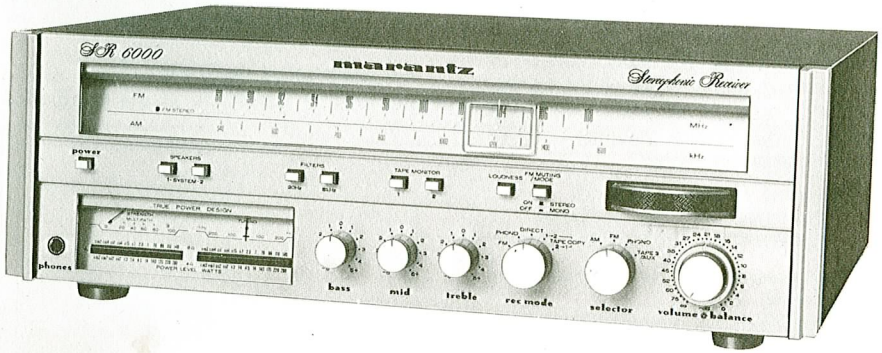
Model SR6000

Model SR1000, 2000, 4000 / SR1000L, 2000L, 4000L

OWNER'S MANUAL

STEREOPHONIC RECEIVER



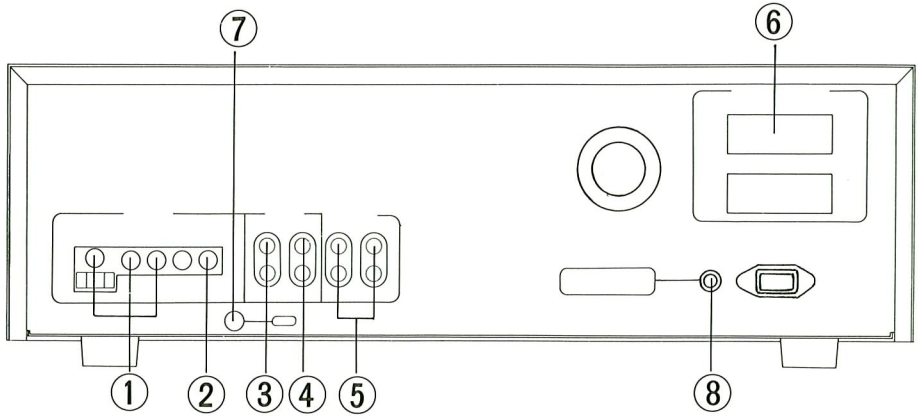
marantz®

MARANTZ CO., INC. 20525 NORDHOFF STREET, CHATSWORTH, CALIFORNIA 91311
A WHOLLY-OWNED SUBSIDIARY OF SUPERSCOPE INC., CHATSWORTH, CALIFORNIA 91311

Printed in Japan

2112851310

SR1000/2000/1000L/2000L



SR4000/4000L/6000

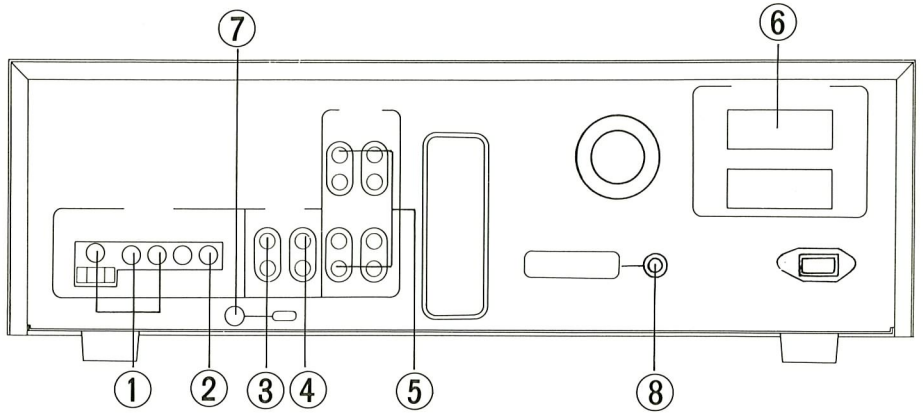


Figure 1. Rear Panel Connection Facilities
Figure 1. Raccordements à la face arrière
Abbildung 1. Rückseitige Anschlüsse und Verbindungen

FOREWORD

To obtain maximum performance and enjoyment from the Stereo Receiver, please study these instructions carefully. Do not plug in or connect this receiver until you have read and complied with this handbook of instructions.

This is a universal handbook designed to provide instructions in English, French and German for all Marantz products sold worldwide.

This manual is divided into two parts. The first covers installation and operation in simple, non-technical language. The second describes your model in more detail with functional explanations.

For quick identification of the controls and connections, references to them are printed in **BOLDFACE** type, exactly as they appear on the front and rear panels of your receiver.

Your Marantz product has been specially prepared to comply with the household power and safety requirements that exist in your locale. Please check the alphabetical suffix following the serial number of your Marantz product. Refer to the following table to note the differences that exist between your unit and the unit pictured and described in this manual.

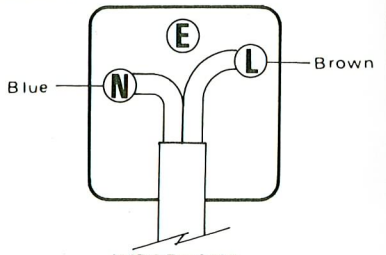
C - Operating Voltage: 120 V AC
Unit cannot be converted to operated on the other voltages.

N - The unit is set for operation on 220 V AC.
The external voltage selector on the rear panel allows to set the unit for operation on 110-120/220-240 V AC. There is an external fuse on the rear panel. There are no AC convenience outlets on the rear panel.
A ground post is provided for connection to a bonified earth ground.

P - Operating Voltage: 120 V AC

Should it become necessary to convert this unit to a different operating voltage, please note that a proper fuse must be substituted for the one currently in the unit.

FOR UNITS SOLD IN THE 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 may not correspond with the terminal identification in your plug, proceed as follows:

* Connect brown wire to the terminal marked "L" or coloured brown or red.
* Connect blue wire to the terminal marked "N" or coloured blue or black.

For 13 A plugs, conforming to BS 1363, use a 3 A fuse.

For other plugs, use a 5 A or lower fuse in the plug or adaptor or at the distribution board.

WARRANTY

FOR WARRANTY INFORMATION, CONTACT YOUR LOCAL MARANTZ DISTRIBUTOR.

RETAIN YOUR PURCHASE RECEIPT

YOUR PURCHASE RECEIPT IS YOUR PERMANENT RECORD OF A VALUABLE PURCHASE. IT SHOULD BE KEPT IN A SAFE PLACE TO BE REFERRED TO AS NECESSARY FOR INSURANCE PURPOSES OR WHEN CORRESPONDING WITH MARANTZ.

IMPORTANT

WHEN SEEKING WARRANTY SERVICE, IT IS THE RESPONSIBILITY OF THE CONSUMER TO ESTABLISH PROOF AND DATE OF PURCHASE. (YOUR PURCHASE RECEIPT OR INVOICE IS ADEQUATE FOR SUCH PROOF).

GARANTIE

POUR LES CONDITIONS DE GARANTIE, VEUILLEZ VOUS ADRESSER A VOTRE DISTRIBUTEUR LOCAL.

GARDEZ VOTRE BORDEREAU D'ACHAT

VOTRE RECU D'ACHAT EST LA PREUVE PERMANENTE DE VOTRE ACHAT. IL DOIT ETRE CONSERVE SOIGNEUSEMENT POUR SERVIR DE REFERENCE ULTERIEURE DANS LES CAS NECESSITANT L'INTERVENTION DE L'ASSURANCE, OU EN CAS DE CORRESPONDANCE AVEC LA SOCIETE MARANTZ.

IMPORTANT

SI LE RECOURS A LA GARANTIE EST NECESSAIRE, LE CONSOMMATEUR DOIT FOURNIR LA PREUVE DE L'ACHAT ET LA DATE. DANS CE CAS, LE BORNEREAU OU LA FACTURE SERT DE PREUVE.

GARANTIE

INFORMATION ÜBER GARANTIE-BESTIMMUNGEN ERHALTEN SIE BEI IHREM ÖRTLICHEN MARANTZ-HÄNDLER.

BEWAHREN SIE IHREN KASSENZETTEL AUF!

IHR KASSENZETTEL DIENT IMMER ALS BEWEISUNTERLAGE EINES GETÄTIGTEN KAUFS. ER SOLLTE AN EINEM SICHEREN ORT AUFBEWAHRT WERDEN, UM IHN GEGEBENENFALLS FÜR VERSICHERUNGSZWECKE ODER BEIM BRIEFVERKEHR MIT MARANTZ VORZUWEISEN.

BEHALTEN SIE IHREN KASSENZETTEL!

FALLS SIE DIE GARANTIE IN ANSPRUCH NEHMEN WOLLEN, IST DER VERBRAUCHER FÜR DEN NACHWEIS DES KAUFS UND DES EINKAUFSDATUMS VERANTWORTLICH (DER KASSENZETTEL ODER DIE RECHNUNG GENÜGEN ALS BEWEIS.)

PURCHASER'S RECORD
ENREGISTREMENT D'ACHAT ▶
EINKAUFSREGISTER

Model Purchased _____

Modèle acheté _____

Modellbezeichnung _____

Date of Purchase _____

Date d'achat _____

Datum des Kaufs _____

Place of Purchase _____

Lieu d'achat _____

Wo gekauft _____

Address _____ City _____ State _____

Adresse _____ Ville _____ Province _____

Adresse _____ Stadt _____ Land _____

Serial Number _____

Numéro de série _____

Seriennummer _____

GENERAL DESCRIPTION

Your Receivers are all solid-state incorporating the innovative design and unparalleled technology that have made Marantz famous in the audio component industry.

The SR1000/SR1000L features a sensitive stereo FM tuner, a highly selective AM tuner, and a low distortion preamplifier and amplifier on a single chassis. The FM tuner utilizes a dual gate MOSFET front end, ceramic I.F. filters, and a Phase Locked Loop multiplex decoder. The AM tuner features an advanced integrated circuit with ceramic and L-C filters for high selectivity and low interference. The amplifier section permits the connection of two stereo pairs of loudspeakers, a turntable or record changer, a tape recorder, headphones, and a second tape recorder or an auxiliary source, such as an additional tuner or a TV sound source.

The SR2000/SR2000L features in addition to the above a midrange tone control and separate left and right channel power level meters.

The SR4000/SR4000L additionally features independent tape-to-tape copy, tape monitoring for two tape decks, and separate left and right channel LED (Light Emitting Diode) Power Level meters.

The SR6000 features a sensitive stereo FM tuner, a highly selective AM tuner, and a low distortion preamplifier and amplifier on a single chassis. The FM tuner utilizes an FET front end, ceramic IF filters, and a phase locked loop multiplex decoder. The AM tuner features an advanced integrated circuit with ceramic and L-C IF filters for high selectivity and low interference. The amplifier sections permit the connection of two stereo pairs of loudspeakers, a turntable or record changer, two tape recorders, stereo headphones, and an auxiliary source such as an additional tuner or a TV sound source.

AFTER UNPACKING

It is advisable to retain all original packing material to prevent damage should you wish to transport or ship your receiver (refer to page 13 for repacking and shipping instructions). Be careful that you do not inadvertently throw away or lose the parts packed with the unit.

Please inspect your Stereophonic Receiver carefully for any signs of shipping damage. Our very strict quality control and professional pride ensure that each receiver left the factory in perfect condition. If the unit is damaged or fails to operate, immediately notify your dealer. If the unit was shipped to you directly, notify the transportation company without delay. Only you, the consignee, may institute a claim against the carrier for shipping damage. Save the carton and all packing material as evidence of damage for their inspection. If necessary, contact your dealer or, as a last resort, your Marantz importing agent, who will fully cooperate under such circumstances.

REAR PANEL CONNECTIONS

Figure 1 shows the location of input and output jacks on the rear panel. These jacks are for "permanent" connections. Front panel jacks and their use will be discussed later.

All connections to the rear panel should be made with the power to the entire system turned off. The rear panel signal connections are arranged in stereo pairs. All signal connections to your receiver with the exception of the FM antenna and loudspeakers, should be made with shielded audio cables. To avoid confusion, connect one cable at a time between your receiver and the other components of your system. This is the safest way to avoid cross-connecting channels or confusing signal inputs with outputs.

FM ANTENNA

Included in the accessory kit is a ribbon type "folded dipole" FM antenna. This type of antenna is simple and practical and will give adequate results in primary signal areas. To use it, unfold it into a "T" shape and connect its leads to the terminals marked **300Ω** on the back of the tuner. The antenna is designed to operate in a horizontal position. Temporarily (for the purpose of getting started) attach it to a nearby wall.

AM ANTENNA

The ferrite-rod antenna can be swiveled and will give you satisfactory results in primary signal areas. However, an outdoor antenna will provide better reception in weaker signal areas. See "OUTDOOR AM ANTENNA" section, page 5.

OUTDOOR FM ANTENNAS

As stated before, the supplied folded dipole antenna will give satisfactory results in primary signal areas. It should be obvious, however that if you are located in a fringe area where signals are weak, then an outdoor antenna will be necessary. Even if you live in a strong signal location, an outdoor directional antenna may be needed to eliminate "multipath" reflections.

Multipath reflections are responsible for much of the distortion and sibilance associated with poor FM reception. They occur when radio waves from the transmitter bounce off of nearby mountains and tall buildings. The reflected waves follow different, more roundabout paths to your tuner and arrive slightly delayed and out of phase with the direct signal (hence, the term "multi-path"). This causes distortion in the same manner that "ghost" images are generated on television.

The way to minimize multipath is to use a "beam type" antenna that can be aimed toward the FM transmitter and away from the multipath refelctions. The best types of antennas to use are either a "Yagi" or "Log-Periodic" configuration with six or more elements designed expressly for FM reception. If you want to receive stations from more than one general direction, then you will need a good quality antenna rotor system. This will enable you to point the antenna in the direction giving the least multipath interference, by means of a control box located near the tuner.

Another important factor is the type of lead-in wire to use. Unshielded lead-in wires, such as 300-ohm twin lead, can act as an omnidirectional antenna, and can cancel the directional benefits of your antenna.

Therefore, we recommend using a balanced, shielded 300-ohm cable or a coaxial 75-ohm cable with a 300-to-75-ohm matching transformer at the antenna. These types of shielded cable effectively prevent the lead-in from contributing to multipath distortion. The 300-ohm antenna cable should be connected to the two terminals marked **FM** on the **ANTENNA** terminal. When using 75-ohm coaxial antenna cable, connect its shield through the ground strap and the center conductor to the 75 ohm terminal as shown in Figure 2.

Shielded antenna cable will be available at the same store where you buy your antenna. It is considered good practice to connect the antenna mast to an earth ground, both for reasons of safety and noise reduction. If 300-ohm shielded cable is used, connect the shield to ground (**GND**) at the tuner end only.

For rural areas, it is recommended to consult a local dealer about installation and lightning arrestor protection.

We don't recommend using master antenna systems such as those found in apartment buildings. Such systems are usually designed expressly for television reception and frequently suppress or reduce the quality of the FM signals before distribution.

Where outdoor antennas are prohibited or inconvenient, the simplest form of "rabbit-ear" TV antenna is the most practical and will give satisfactory results. This type is preferred over the folded dipole because it can be more readily rotated for the best reception.

(2) OUTDOOR AM ANTENNA

Two single wires are required to make an AM outdoor antenna. First, connect one end of a single wire to the **AM ANTENNA** terminal on the rear panel, and the other end of a very high horizontal antenna wire of 25 to 75 feet in length suspended between insulators in an outdoor location (the higher the better). Next, connect the second single wire between the **GND** terminal of your Receiver and an anthenticated earth ground (such as a metal water pipe).

(3) PHONO INPUTS

The **PHONO** jacks are intended for use with magnetic phono cartridges and have a 47,000 ohm input impedance.

If a hum is heard when playing records, this is an indication that the record player or its connections are incorrectly grounded. Connect a separate ground wire from the turntable or record changer frame to the **GND** binding post of your receiver. If a ground wire has already been connected, try disconnecting it. If this is ineffective, try reversing the polarity of the turntable's power plug.

If hum persists, consult the instruction booklets for the turntable and/or phono cartridge.

(4) TAPE 2/AUX INPUTS

* For Model SR1000, SR2000, SR1000L, SR2000L

The **TAPE 2/AUX** jacks can be used to connect the line outputs of a second tape recorder, an additional tuner or a TV sound source.

(4) TAPE 3/AUX INPUTS

* For Model SR4000, SR6000, SR4000L

The **TAPE 3/AUX** jacks are for miscellaneous high level signal sources such as additional tuners and/or receivers, tape players, phonographs that provide RIAA equalized high level output, TV sound outputs and other external components.

(5) TAPE JACKS

* For Model SR1000, SR2000, SR1000L, SR2000L

The terms IN and OUT refer to the input and output of your receiver. Therefore, the **IN** jacks on your receiver accept signals from the line outputs of your tape recorder; the **OUT** jacks feed signals to the tape recorder's line inputs.

* For Model SR4000, SR6000, SR4000L

The rear panel of your receiver can accommodate two tape recorders. The terms IN and OUT refer to the input and output of your receiver. Therefore, the **IN** jacks on your receiver accept signals from the line outputs of each tape recorder; the **OUT** jacks feed signal to the tape recorder's line inputs.

(6) SPEAKER SYSTEMS

The **SPEAKER SYSTEMS** terminals on the rear panel can accommodate two stereo pairs of loudspeakers. Connect the main pair to the **SYSTEM 1** terminals. The **SYSTEM 2** terminals are for a second stereo pair of loudspeakers (See Figure 5). Selection of loudspeaker systems is made with the **SPEAKERS** switch on the front panel.

To connect the speakers to your receiver, use ordinary #18 gauge two conductor lamp cord. For distances longer than 30 feet, use #16 gauge wire or heavier.

SPEAKER PHASING

To assure the best stereo separation and frequency response, the speakers must be properly phased. The positive terminal on each speaker should be connected to its respective (+) terminal on your receiver, and the

negative or "common" terminal should be connected to its respective (–) terminal. To verify that a pair of speakers are correctly phased, perform the following test:

1. Complete the necessary signal connections so that program material may be played through the speakers.
2. Place the speakers in the center of the room.
3. Depress the **FM MUTING/MODE** pushswitch and play a record (or radio or tape) with strong bass tones at a low volume level. Center the **BALANCE** control.
4. Position the speakers about six inches apart, face-to-face. Listen, particularly to the apparent loudness of the bass tones.
5. Next, turn off all power, but do not disturb the **VOLUME** or **BALANCE** settings. Reverse the connections on the right speaker only. Turn on the power and listen again. If the bass tones now seem louder than in (4), you have corrected the phasing between the speakers. If the bass notes now sound softer, turn off the power and re-connect the speakers as they had been originally.
6. If an additional pair of speakers is used along with the system 1 speaker system, check phasing between the system 2 speakers and the system 1 speakers. Use the **BALANCE** control to play only two speakers at once, and invert the wiring on the system 2 speakers as necessary. Do not change the connections on the system 1 speaker system.
7. Once having phased all speakers, you need not repeat this procedure in the future if you now mark the speaker connections and/or cables. Any method of coding is satisfactory, provided it enables you, in the future, to duplicate your now-correct hookup between speakers and amplifier.

Use caution when connecting your Receiver to a loudspeaker with built-in power supply, such as an electrostatic loudspeaker. The "common" connection terminal of such a speaker may be capacitively coupled to ground through its own power supply. To protect from distortion and possible overload, make sure the (–) terminals of your receiver are connected to the "common" terminals of such a loudspeaker system.

CAUTION: Never directly connect the loudspeaker terminals of one channel in parallel with those of any other. Any resulting damage is not covered under warranty.

NOTE: Do not use 4 ohm speakers if system 1 and system 2 speakers are to be used simultaneously. Use 8 or 16 ohm speakers only.

CONVENIENCE OUTLETS
(C and P models only)

One **UNSWITCHED** and one **SWITCHED AC OUTLET** are provided on the rear panel for powering associated components of your system (tape recorder, record player, etc.).

The **SWITCHED** outlet provides power only when the **POWER** pushswitch is depressed while the **UNSWITCHED** outlet provides power even while the **POWER** pushswitch is in its OFF(up) position.

(7) GND BINDING POST

The **GROUND** post is used when connecting an external AM antenna or when attaching a ground wire from a turntable to the receiver when hum is apparent.

AC POWER CONNECTIONS

The correct voltage for operating your equipment is printed on the rear panel. Be sure the **POWER** pushswitch is "OUT" before plugging the AC LINE cord into an electrical outlet.

CAUTION: Do not plug your model into a DC outlet, as serious damage will occur.

(8) AC PROTECTOR FUSE

This feature automatically disconnects AC power in the event of a power source or circuit overload. If the **POWER** pushswitch is activated and the front panel fails to illuminate and no sound is heard through the speakers, turn off the power and unscrew the fuse holder on the rear panel and visually inspect the fuse to see if the internal conducting filament has opened. If so, replace the fuse with one having the same specifications. See "Fuse Replacement", page 12.

SIMPLIFIED OPERATING PROCEDURES

When operating your Stereo Receiver for the first time, follow these simple directions. Later, full advantage can be taken of its versatility with the remaining controls and pushswitches.

Step 1. Connect the FM antenna to the appropriate terminals on the rear panel.

Step 2. Connect the speakers to the **SYSTEM 1** speaker terminals.

Step 3. Place all pushswitches in the "out" position.

Step 4. Turn the **VOLUME** control all the way to the left (counterclockwise) and set the **BALANCE** control in center position.

Step 5. Rotate **TREBLE**, **MID** and **BASS** controls to the 12 o'clock position (each pair of pointers to dot).

Please note that the SR1000/SR1000L has only **BASS** and **TREBLE** controls.

Step 6. Push the **SPEAKERS SYSTEM 1** pushswitch.

Step 7. Apply AC line power by depressing the **POWER** switch.

Step 8. Select the desired program source by setting the **SELECTOR** switch to the appropriate position. If **FM** or **AM**(**LW**, **MW**)* is selected, rotate the TUNING knob until the desired station is tuned. Adjust the **VOLUME** control to a comfortable listening level.

( )* For Model SR1000, SR2000L, SR4000L

MAIN CONTROLS AND SWITCHES

(9) POWER SWITCH

The **POWER** switch, when depressed, supplies AC power to your receiver and to the **SWITCHED** outlet on its rear panel (C and P models only).

(10) TUNING METERS

★ For Model SR1000, SR2000, SR1000L, SR2000L

Your receiver is equipped with a dual purpose **TUNING** meter. The **TUNING** meter displays signal strength during AM (MW, LW)* reception and functions as a center tuning meter during FM reception.

( )* For Model SR1000L, SR2000L

★ For Model SR4000, SR6000, SR4000L

Your receiver is equipped with two meters, a **SIGNAL STRENGTH** meter and an **FM TUNING** meter.

1. The **SIGNAL STRENGTH** meter indicates the relative signal strength of any AM(LW, MW)* or FM broadcast.
2. The **FM TUNING** meter operates only when FM is selected and indicates correct station tuning when centered.

( )* For Model SR4000L

(11) SPEAKERS SYSTEM SWITCHES

These switches select the loudspeaker terminals to which audio power is fed. Either the SYSTEM 1 or the SYSTEM 2 stereo pair of loudspeakers may be operated individually, or simultaneously if both switches are depressed. When the two **SPEAKER SYSTEM** switches are in the normal "out" position, all loudspeaker terminals are internally disconnected from the power amplifier section. The signal at the headphones jack is not affected by the **SPEAKER SYSTEM** switches. The "out" position allows "private listening" when stereo headphones are used.

NOTE: Volume level should be reduced to minimum when switching speakers.

⑫ 20 Hz FILTER SWITCH

★ For Model SR6000

The **20 Hz FILTER** pushswitch activates a low frequency filter which has little or no effect on the system's overall frequency response, because frequencies of 20 Hz and lower are below the range of most program material.

The filter will, however, substantially improve system performance when you play phonograph records at high volume levels. A high quality phono cartridge will faithfully reproduce turntable rumble, record cutting lathe rumble, and even the slight warp of a new record. This low frequency noise, although inaudible to humans, can cause large excursions of the woofer cones. An unnecessarily large amount of amplifier power is wasted reproducing these low frequency noise components. Activating the **20 Hz FILTER** switch prevents this from happening and allows more power to be made available for the important program frequency range.

⑬ 8 kHz FILTER SWITCH

★ For Model SR6000

This switch can be used to reduce high frequency noise such as that associated with the playing of poorly recorded tapes or worn disc recordings. When the AM tuner is being used, this switch will help to suppress considerably the high pitched "whistle" caused by adjacent AM channel interference. This filter will also, along with high frequency noise, slightly attenuate high frequency program material, and should therefore be used judiciously. Neither of the filter switches affect the recording outputs.

⑭ LOW FILTER SWITCH

★ For Model SR1000, SR2000, SR1000L, SR2000L (European models only), SR4000, SR4000L

This pushswitch activates a low frequency filter which has a little effect on the systems overall frequency response, but can substantially improve system performance when playing phonograph records at high volume levels.

A high quality phono cartridge will faithfully reproduce turntable rumble, record cutting lathe rumble, and even the slight warp of a new record. This low frequency noise, although inaudible to humans, can cause large excursions on the woofer cones. An unnecessarily large amount of amplifier power is wasted reproducing these low frequency noise components. Activating the **LOW FILTER** switch prevents this from happening and allows more power to be made available for the important program frequency range.

⑮ LOUDNESS SWITCH

The **LOUDNESS** switch compensates for human hearing characteristics by boosting the bass and treble response at low volume levels to achieve a more pleasing tonal balance.

⑯ TAPE MONITOR SWITCHES

When the **TAPE MONITOR 1** or **2*** switches are depressed individually, the tape recorder connected to the corresponding **TAPE MONITOR IN** jacks can be monitored. The **TAPE MONITOR** switches interlock electronically, so that only one tape recorder will be heard at a time. If both **TAPE MONITOR** switches are depressed simultaneously, only Tape Recorder 1 will be heard.

* For Model SR4000, SR6000, SR4000L

⑰ TAPE COPY SWITCH

★ For Model SR4000, SR4000L

This switch allows tape copying from the recorder connected to the **TAPE MONITOR 1** jacks onto the recorder connected to the **TAPE MONITOR 2** jacks without affecting the listening of a different source (such as the radio section). For detailed information on how to operate the TAPE copy system, see the following section on tape recorders.

⑱ FM MUTING/MODE SWITCH

This switch controls FM muting and mode at the same time. When this switch is set to the OUT position, the FM MUTING function is turned ON, and MODE is put into STEREO. Setting this switch to the IN position turns FM MUTING off and puts FM MODE into MONO.

When tuning to FM broadcasts with the **FM MUTING/MODE** switch in its "out" position, the muting circuit will eliminate interstation noise. To prevent muting very weak stations along with the noise, the muting function may be switched out of the FM circuits by depressing the **FM MUTING/MODE** pushswitch.

When a marginal FM stereo signal is received, random noise and phase modulation may cause the tuner's multiplex circuitry to trigger the **STEREO** indicator intermittently. In this case, it is sometimes desirable to cancel the multiplex operation entirely in favour of obtaining a more listenable signal. The **FM MUTING/MODE** switch performs this function and converts all output signals to the MONOPHONIC mode.

While playing a single channel source such as TV, depress the **FM MUTING/MODE** pushswitch to hear the source through both speakers. When playing a monophonic phonograph record, use this pushswitch to suppress rumble, record surface noise, and pinch effect distortion.

⑲ GYRO-TOUCH TUNING KNOB

★ For Model SR1000, SR2000, SR1000L, SR2000L

AM(MW, LW)*:
Switch the **SELECTOR** to **AM (MW, LW)*** and tune to the desired station. Then rotate the GYRO-TOUCH TUNING knob slightly back and forth until the maximum reading is obtained on the **TUNING** meter.

( )* For Model SR1000L, SR2000L

FM:
Switch the **SELECTOR** to **FM** and tune to the desired station. Then slowly rotate the GYRO-TOUCH TUNING knob back and forth until the **TUNING** Meter points to the center scale position. The multiplex section of your receiver is equipped with electronically triggered circuits which mute interstation noise and automatically switch to the proper mode of operation for stereo and monophonic FM broadcasts. In addition, the **STEREO** indicator light automatically indicates a stereo broadcast.

★ For Model SR4000, SR6000, SR4000L

AM(MW, LW)*:
Switch the **SELECTOR** to **AM(MW, LW)*** and tune to the desired station. Then rotate the GYRO-TOUCH TUNING knob slightly back and forth until the maximum reading is obtained on the **SIGNAL STRENGTH** meter. The **TUNING** meter is not used for AM(MW, LW)*

( )* For Model SR4000L

FM:
Switch the **SELECTOR** to **FM** and tune to the desired station. Then slowly rotate the GYRO-TOUCH TUNING knob back and forth until maximum reading is obtained on the **SIGNAL STRENGTH** meter and the **TUNING** meter points to the center scale position. The multiplex section of your receiver is equipped with electronically triggered circuits which mute interstation noise and automatically switch to the proper mode of operation for stereo and monophonic FM broadcasts. In addition, the **STEREO** indicator light automatically indicates a stereo broadcast.

⑳ VOLUME CONTROL

★ For Model SR1000, SR1000L

The **VOLUME** control adjusts the level of both output channels simultaneously while maintaining stereo balance at all normal settings. It does not affect the recording outputs.

★ For Model SR2000, SR4000, SR6000, SR2000L, SR4000L

This control is used to adjust the overall sound level from the speakers and headphones while maintaining proper stereo balance. The position of this control does not affect the signal at the **TAPE MONITOR OUT** jacks.

(21) BALANCE CONTROL

★ For Model SR1000, SR1000L

This control alters the output level of either channel. As the knob is turned away from the normal 12 o'clock position, it decreases the level in one channel, while it maintains the level in the other channel. (Because the balance control knob has been set for precise electrical balance when the pointer is at the indicator dot at the 12 o'clock position, there may be slightly greater mechanical rotation off center in one direction than in the other.)

★ For Model SR2000, SR4000, SR6000, SR2000L, SR4000L

The **BALANCE** control (located on the outer ring of the **VOLUME** control) may be positioned to the left or right of center for the desired speaker balance. Normally this control should remain in the center (detented) position.

(22) SELECTOR SWITCH

The **SELECTOR** switch selects the program source for listening or recording. If a tape recorder's playback output has been connected to the **TAPE MONITOR 1 IN** jacks or **TAPE MONITOR 2 IN*** jacks on the rear panel, you can select it by depressing the **TAPE MONITOR 1** or **TAPE MONITOR 2*** pushswitch.

* For Model SR4000, SR6000, SR4000L

(23) REC MODE SWITCH

★ For Model SR6000

This switch controls the input signals that are fed to the tape recorders connected to the **TAPE MONITOR 1** and **TAPE MONITOR 2** jacks. For detailed information on the operation of this control, see the section on using tape recorders.

(24) BASS, MID AND TREBLE CONTROLS

The three tone controls, **BASS**, **MID** and **TREBLE**, adjust the normally "flat" frequency response of your receiver to suit individual listening preference.

The **BASS** control adjusts the low frequency tones, the **MID** control adjusts the middle frequency tones, and the **TREBLE** control adjusts the high frequency tones.

Please note that the SR1000/SR1000L has only **BASS** and **TREBLE** controls.

These controls may be adjusted to compensate for unbalanced room acoustics. The tone controls have no effect on the signals present at the **TAPE MONITOR 1** or **TAPE MONITOR 2** output jacks.

(25) POWER METERS

★ For Model SR1000, SR2000, SR1000L, SR2000L

These meters read directly in watts being delivered to the speakers. Because music contains both soft and loud passages, the power being delivered to the speakers (and therefore the meter readings) will constantly be changing in response to the music.

(26) LED POWER INDICATORS

★ For Model SR4000, SR6000, SR4000L

These LED's (Light Emitting Diodes) allow a direct readout of the amount of power being supplied to the speakers. The upper scale is calibrated for an 8 ohm speaker system and the lower scale is calibrated for a 4 ohm speaker system (such as when using 4 ohm speakers or two 8 ohm speaker systems) simultaneously.

(27) PHONES JACK

This jack accepts headphones utilizing a standard three conductor phone plug.

It is internally connected to the power amplifier section through isolation resistors to provide adequate sound level with popular low impedance headphones as well as with high impedance units. Two or more sets of headphones may be used with the aid of "Y" connectors. However, output level will drop as additional headphones are added.

The headphone jack output and recording outputs are not affected by the **SPEAKERS** switches.

USING TAPE RECORDERS WITH YOUR RECEIVER

★ For Model SR1000, SR2000, SR4000, SR1000L, SR2000L, SR4000L

TAPE RECORDING

When the **TAPE MONITOR 1** or **TAPE MONITOR 2*** pushswitches are "out", the program being recorded and heard is determined by the setting of the **SELECTOR** switch. When one of the **TAPE MONITOR** pushswitches are depressed, the amplifier input connections are switched to the output of the tape recorder just selected. Pushing the **TAPE MONITOR** switches does not affect the signal being recorded onto the tape recorder, thus allowing you to listen to the signal being recorded before and after recording.

A second tape recorder can be connected to the SR1000, SR1000L, SR2000 and SR2000L by connecting the line outputs of the second recorder to the **TAPE 2/AUX** jacks and connecting the line inputs through a "Y" connector of the type shown in Figure 3 in parallel with the **TAPE MONITOR 1 IN** jacks.

* For Model SR4000, SR4000L

DUBBING

★ For Model SR1000, SR2000, SR1000L, SR2000L

A tape played on tape recorder 2 may be copied on to tape recorder 1. Set the **SELECTOR** switch to **TAPE 2/AUX**. To monitor tape recorder 1 as it is being recorded, depress the **TAPE MONITOR 1** switch. To monitor the source (which is, in this case, tape recorder 2), release **TAPE MONITOR 1** switch. Either tape or source can be monitored without disturbing the actual recording process.

★ For Model SR4000, SR4000L

A tape played on tape recorder 1 may be copied onto tape recorder 2 by depressing the **TAPE COPY 1 → 2** switch. Depressing one of the **TAPE MONITOR** switches will allow you to hear the recording in process without affecting it. You can also listen to a completely separate source (such as the radio) without affecting the tape copying in progress.

TAPE RECORDING AND DUBBING

★ For Model SR6000

The **REC** (record) **MODE** switch selects the signal source to be sent to the two tape recorders. The **REC MODE** switch operates independently from the **SELECTOR** switch. The **REC MODE** switch has 5 positions:

FM : In this position, the output of the tuner section can be recorded directly onto the tape.

PHONO : In this position, the output from a turntable or record changer can be recorded directly onto the tape.

DIRECT : In this position, the tape recorders' inputs are selected by the position of the **SELECTOR** switch. In other words, this is the "normal" position for routine recording and listening.

TAPE COPY : These are the switch positions used for making tape copies. **TAPE COPY 1 → 2** indicates that tape 1 is being copied onto tape 2. **TAPE COPY 2 → 1** indicates that tape 2 is being copied onto tape 1.

The **REC MODE** switch and the **SELECTOR** switch offer a great number of recording/listening combinations. For example, it is possible to make a tape copy while simultaneously listening to a phonograph record. Of course, you can check the progress of the tape recorders at any time by using the **TAPE MONITOR** switches without affecting the recording process.

MAINTENANCE

CLEANING

The satin gold anodized finish of the knobs and heavy aluminum front panel will last indefinitely with proper care and cleaning. **NEVER** use scouring pads, steel wool, scouring powders, or harsh chemical agents, such as lye solution. These will mar the finish. Clean with a soft, lint-free cloth or cotton swab slightly dampened with a mild solution of detergent and water.

Your receiver is provided with air filtering material in the slotted areas of the top and bottom cover. These filter areas should be cleaned periodically, (at least once each year) to remove dust that may clog the filter and retard cooling. There is no need to remove the top or bottom cover to accomplish cleaning. Simply vacuum the slotted areas in the top, sides and bottom of the unit.

FUSE REPLACEMENT

Your receiver is protected by a fuse of the proper type and rating for the voltage found in your locale. In the event the fuse blows out, replace it **ONLY** with a fuse of the same type and rating. Replacement with a fuse of higher rating or slower action will not protect the instrument and will void the warranty.

IN CASE OF DIFFICULTY

Should you experience difficulties when operating your system for the first time, and you have followed the procedure outlined in the "Simplified Operating Procedures", use of the following data will help you correct or isolate the problem. If these hints fail to remedy the situation, refer the problem to your nearest authorized service facility.

*** Receiver does not operate, and dial lamps do not illuminate.**

1. Make sure power cord is properly connected.
2. Check AC line fuse; replace if necessary (the unit should be OFF when replacing the fuse).

*** Receiver does not operate, but dial lamp is on.**

1. Check settings of controls such as **SELECTOR**, **TAPE MONITOR**, **SPEAKERS** switches, **VOLUME**, etc.
2. Turn off **POWER** and check connection of cables from turntables, tape decks, speakers, and other equipment.

   Make sure speaker wires are not shorted together.

*** Receiver operates in one channel only.**

1. Check setting of **BALANCE** control.
2. Turn off system power and transpose (left for right) the speaker cables at the **SPEAKER SYSTEMS** terminals. If opposite channel becomes inoperative when turned back on, either the cable or speaker is at fault.

*** No FM reception.**

1. Release **FM MUTING/MODE** switch.
2. Connect FM antenna.

*** FM reception sounds scratchy or raspy.**

1. Make sure FM antenna is connected properly.
2. Try re-orienting FM antenna.
3. Determine if you are in a poor reception area. If so, refer to "OUTDOOR FM ANTENNAS" section.

*** AM reception poor.**

1. Determine if other components in your system, appliances, or fluorescent lights are causing interference.
2. Try an outdoor AM antenna. See "AM ANTENNA" section.

*** Loud hum in phono.**

1. Check to see that phono plugs and jacks are clean and properly connected.
2. Try connecting turntable ground wire (usually colored green) to **GND** post on rear panel of receiver.
3. If ground wire is already connected, try disconnecting it.
4. Make sure phono cartridge is wired properly and making good contact with terminals in tone arm.

REPAIRS

Only the most competent and qualified service technicians should be allowed to service your receiver. The Marantz Company and its factory trained warranty station personnel have the knowledge and special equipment needed for repair and calibration of this precision instrument. In the event of difficulty, refer to the list of Authorized Marantz Service Stations packed with your receiver or write directly to the location listed below for the name and address of the Marantz Authorized Service Station nearest your home or business. Please include the model and serial number of your unit together with a full description of what you feel is abnormal in its behavior.

REPACKING FOR SHIPMENT

Should it become necessary to repack your Model for shipment to the factory, to an authorized service station, or elsewhere, please observe the following precautions:

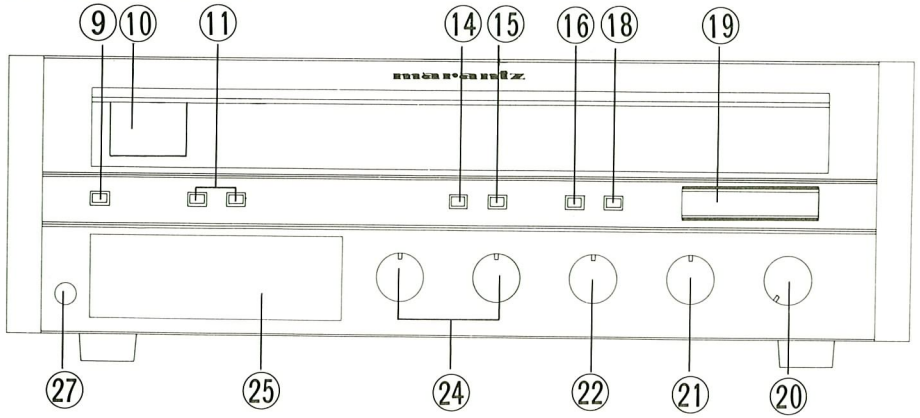
a. Pack the unit carefully, using the original material as shown in Figure 8.
   PLEASE NOTE (for Canada only) that if you have discarded, lost, or damaged the packing material, new packing material may be obtained by writing to the Marantz Technical Services Department. The carton, its fillers, and packing instructions will be returned to you at a nominal charge.

b. Ship via a reputable carrier (do not use Parcel Post) and obtain a shipping receipt from the carrier.

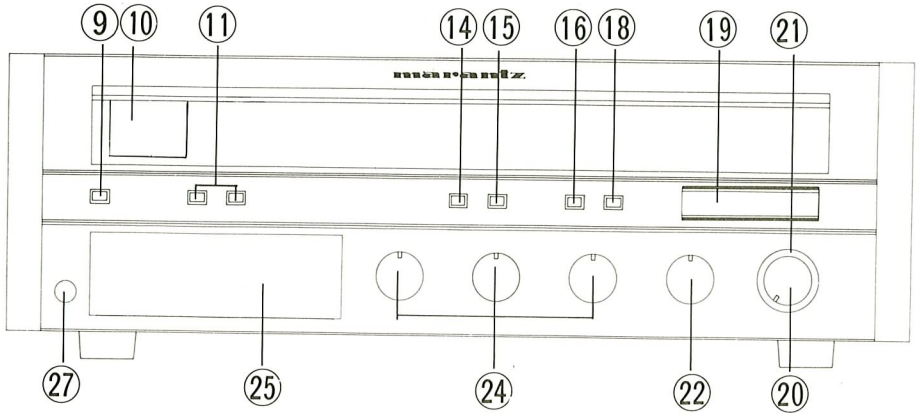
c. Insure the unit for its full value.

d. Be sure to include your return address on the shipping label.

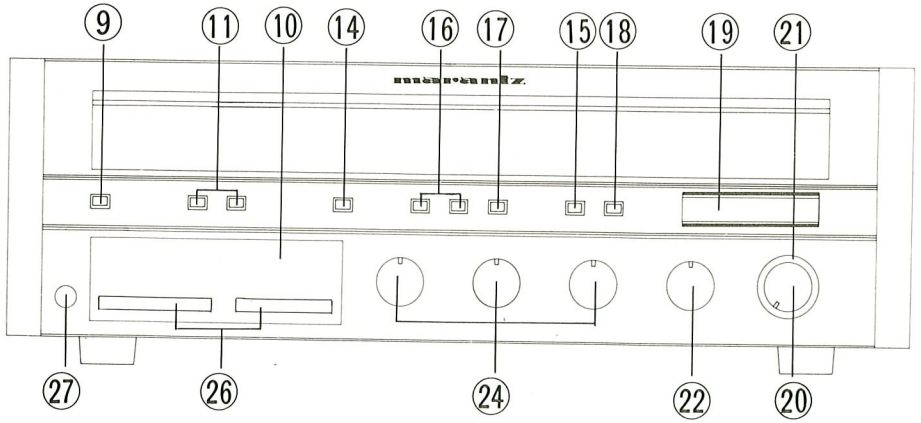
SR 1000/1000L



SR 2000/2000L



SR 4000/4000L



SR 6000

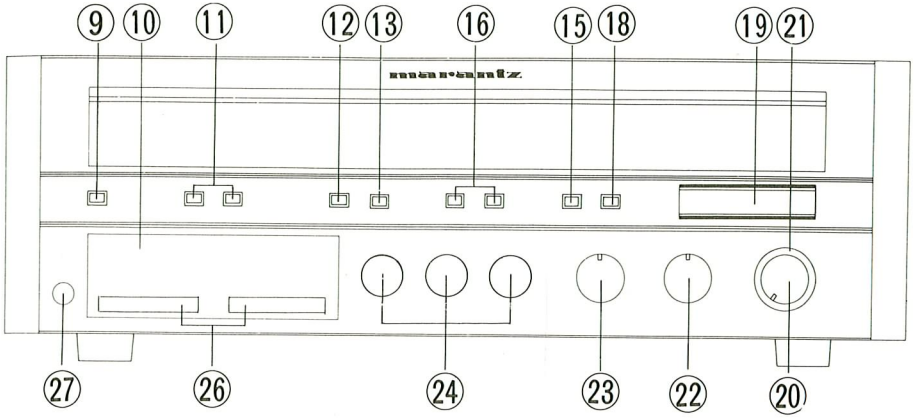


Figure 7. Front Panel
Figure 7. Face avant
Abbildung 7. Gerätevorderseite

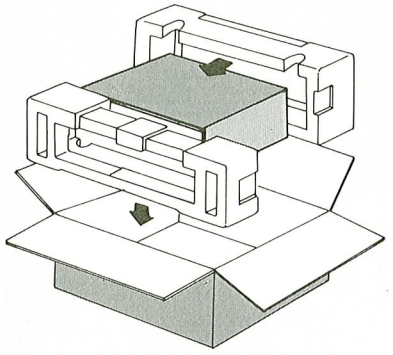


Figure 8. Repacking Illustration
Figure 8. Instructions pour le remballage
Abbildung 8. Wiederverpacken des Gerätes

Superscope, Inc.
National Service Dept.
20525 Nordhoff Street
Chatsworth, CA 91311
U.S.A.

Superscope Canada, Ltd.
3710 Nashua Drive
Mississauge, Ontario
Canada L4V1M5

Superscope Europe, S.A.
326, Avenue Louise
Boite 32
1050 Brussels
Belgium

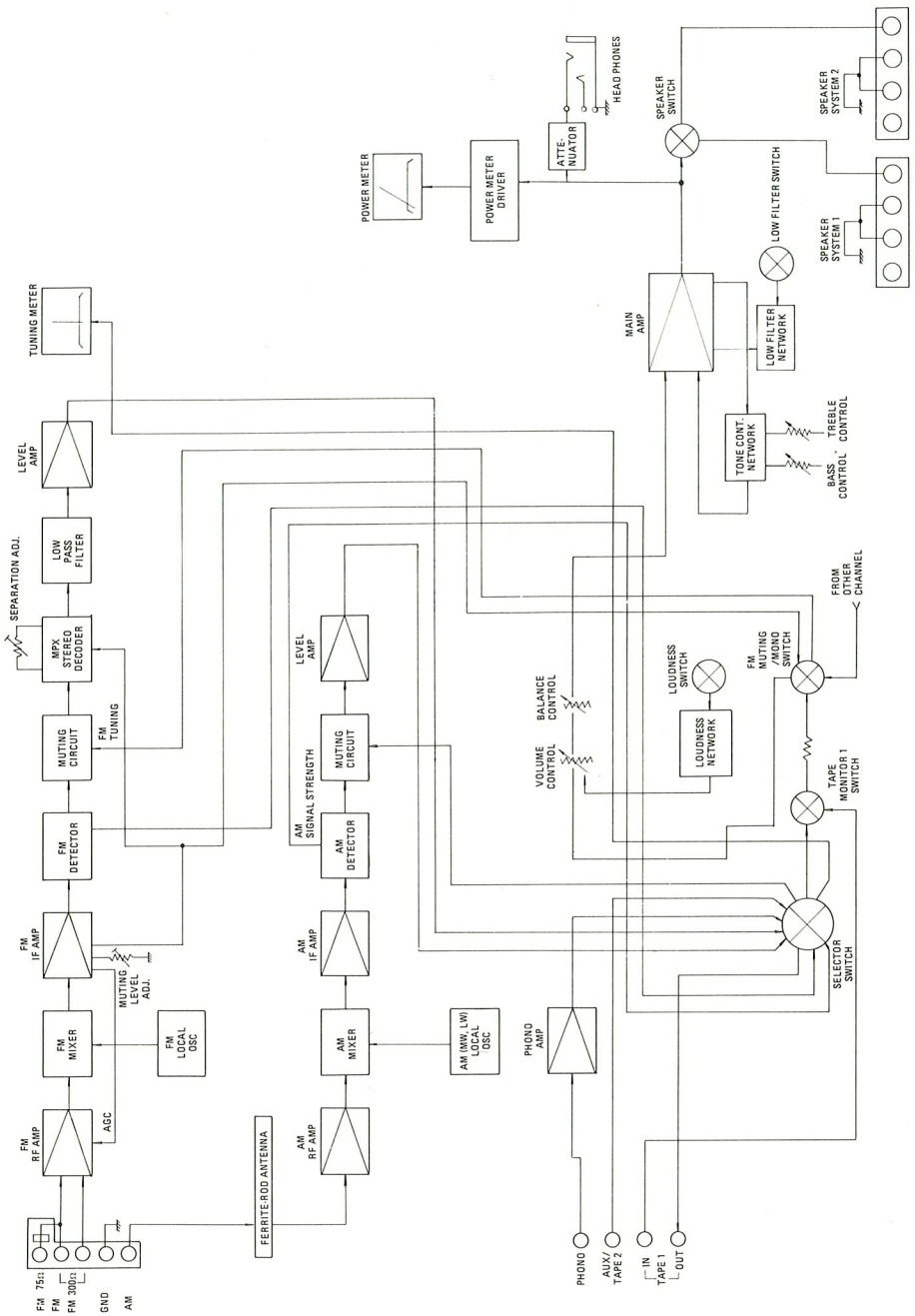
Superscope GmbH
Max-Planck-Straße 22,
D-6072 Dreieich
West Germany

Marantz France
9, Rue Louis Armand
ASNIERES (Hauts-de-Seine)
France

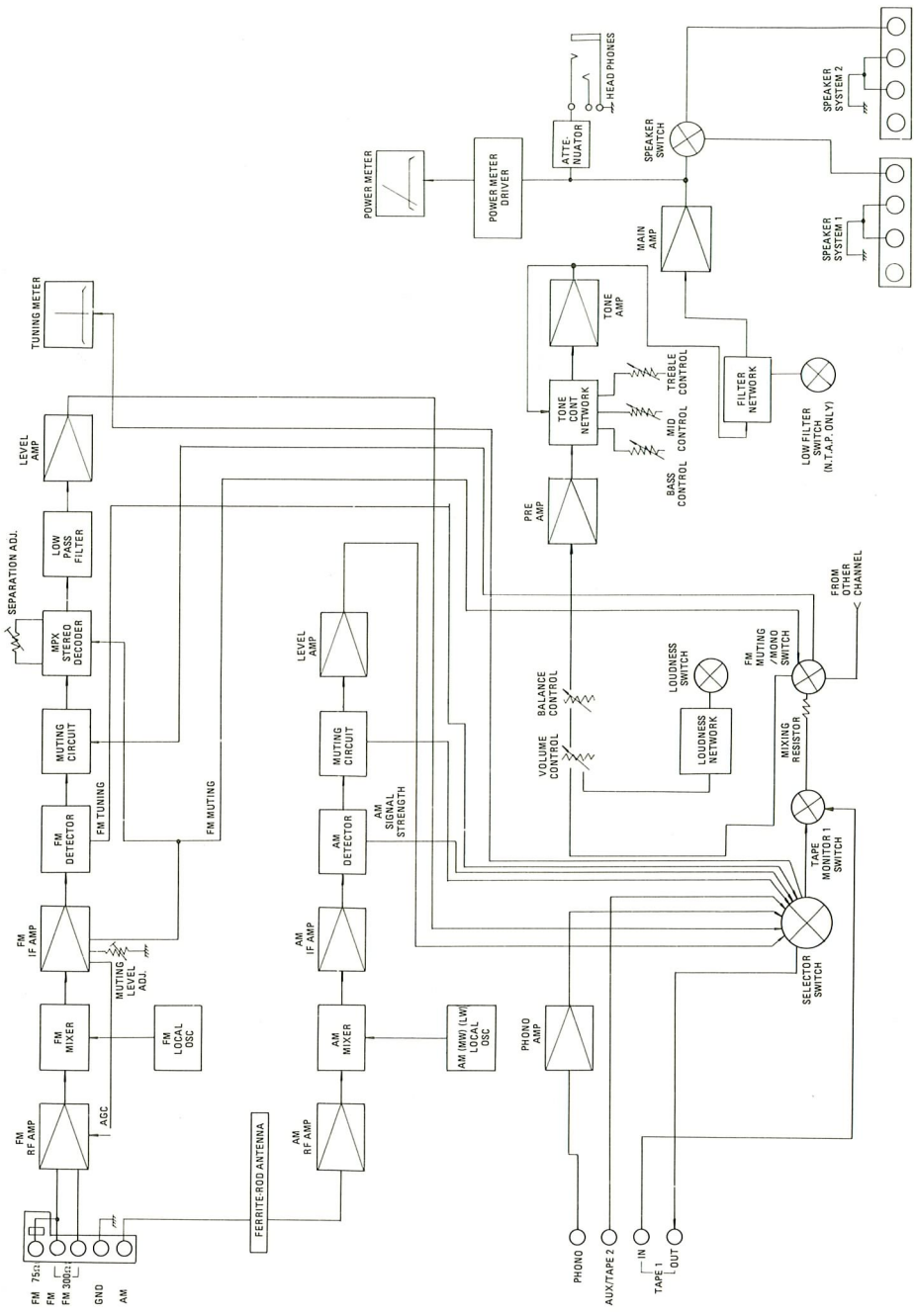
Marantz Belgium
45 rue Auguste Van Zande
1080 BRUSSELS
BELGIUM

Marantz Audio LTD.
203, London Road
STAINES, Middlesex
United Kingdom

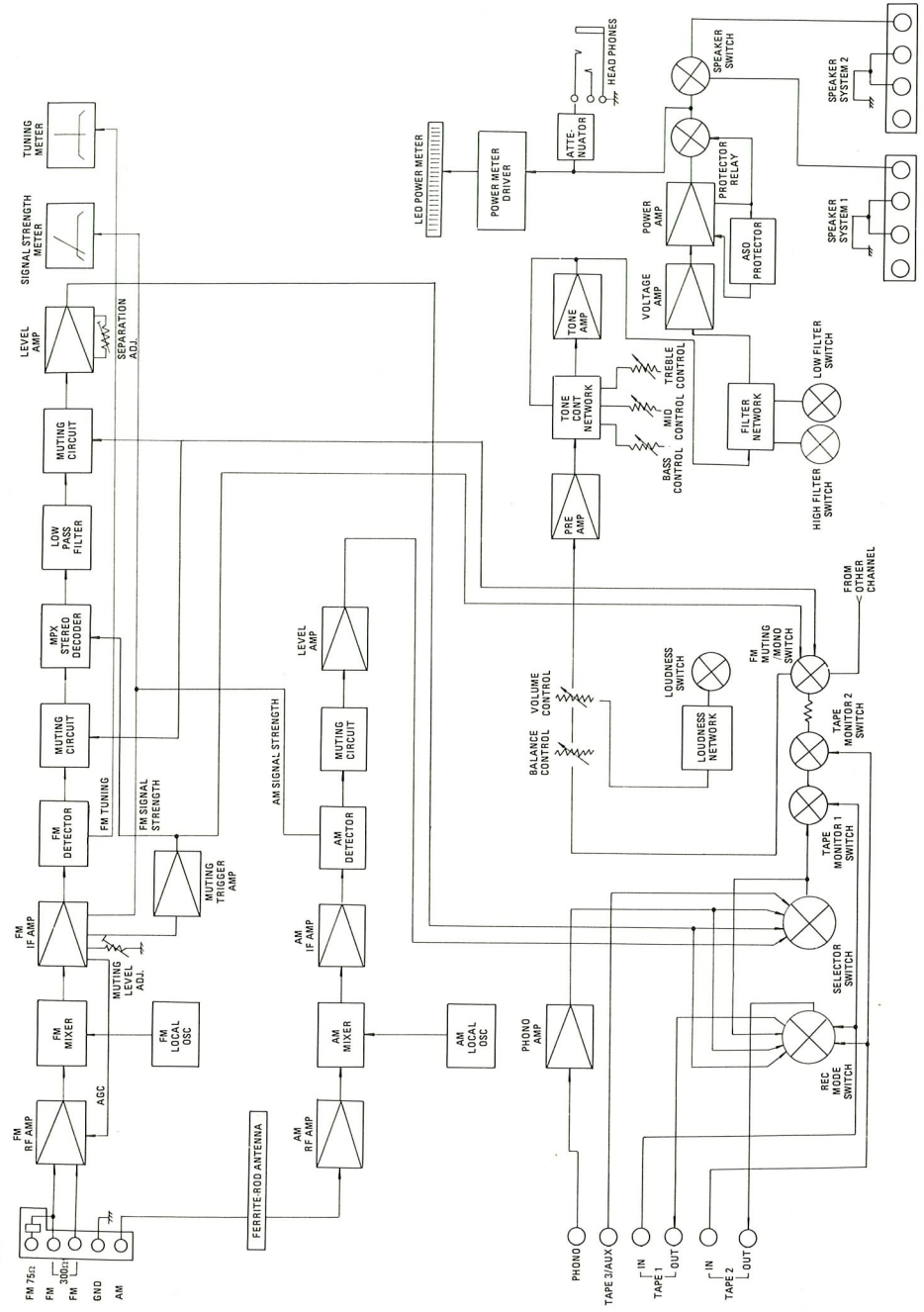
FUNCTIONAL BLOCK DIAGRAM For Model SR1000/1000L



Model SR2000/2000L



Model SR6000



Printed in Japan

2112851310