marantz

Model 1060 Console Stereo Amplifier

Handbook of Instructions

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WARRANTY

Marantz Company, Inc., proudly warrants your Marantz product to be free of manufacturing defects in material and workmanship as follows:

From date of purchase

Electronic Components and Receivers	**PARTS - 3 years LABOR - 3 years**
Headphones	**PARTS - 3 years LABOR - 3 years**
4-Channel Remote Control	**PARTS - 3 years LABOR - 3 years**
Plug-in Matrix Decoders	**PARTS - 3 years LABOR - 3 years**
Speakers and Cabinets	**PARTS - 5 years LABOR - 5 years**

TO VALIDATE YOUR WARRANTY, YOU MUST FILL OUT AND MAIL THE WARRANTY REGISTRATION CARD TO MARANTZ COMPANY, INC., P. O. BOX 99, SUN VALLEY, CALIFORNIA 91352, WITHIN TEN DAYS FOLLOWING THE DATE OF PURCHASE.

For Warranty repair, send this product to Marantz Company, Inc., 8150 Vineland Avenue, Sun Valley, California 91352, or to an AUTHORIZED Marantz Service Station. All shipping charges must be prepaid, Marantz will pay return shipping charges to any designated point within the United States.

This Warranty is void if the serial number has been altered or removed; if the product is modified or repaired in any manner which Marantz believes may affect the reliability of the product; if the product is not operated in accordance with the instruction manual.

Marantz shall have no liability whatsoever for consequential damages. The sole responsibility of Marantz Company, Inc., under this Warranty shall be limited to the repair of the product, or replacement thereof, in the sole discretion of Marantz Company, Inc.

EXCEPT TO THE EXTENT THAT APPLICABLE LAW PRECLUDES A DISCLAIMER OF WARRANTY, THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS WITH RESPECT TO THIS PRODUCT, NOR ARE THERE ANY OTHER WARRANTIES WHICH EXTENT BEYOND THE PROVISIONS OF THIS WARRANTY.

8150 Vineland Avenue, Sun Valley, California 91352

PURCHASER'S RECORD ▶

REGISTRATION FOR MARANTZ 3-YEAR GOLDEN WARRANTY

Model: Marantz Model 1060 _____

Serial No. _____

Purchaser's Name _____

Purchased From (Name) _____

Address _____

Price Paid $ _____ Date Purchased _____

Date Warranty Reply Card Mailed _____

The above information becomes your permanent record of a valuable purchase. It should be promptly filled in at the same time that you fill in and mail the warranty registration reply card to Marantz. This information provides a valuable insurance record and must also be referred to should you have any correspondence with Marantz.

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FOREWORD

To obtain maximum performance and enjoyment from the Model 1060 stero console these instructions must be studied carefully. Installing and operating the Model 1060 is not complicated, but the flexibility provided by its numerous operating features may not be fully appreciated until a little time is spent becoming familiar with its controls and connections.

For convenience, this manual is divided into two parts. The first part covers installation and operation in a simple, non-technical manner.
The second part provides a more detailed description of the features of the Model 1060. It was written to answer the question "What goes on inside" and to help in situations where the Model 1060 is to be used in special applications. Detailed technical specifications are also included in this part.

For quick identification of the many controls, connection facilities, and adjustments on the Model 1060 stereo console, all references to them in this manual are printed in **bold face type.** Notice that the spelling, capitalization, abbreviation, and punctuation of all such markings appear exactly as lettered on the front and rear panels of the instrument.

It will be to your advantage to save all the packing materials carton, fillers, cushioning, etc. They will prove valuable in preventing damage should you ever have occasion to transport or ship the Model 1060. Be careful that you do not inadvertently throw away or lose the Parts packed with the unit. Please inspect this unit carefully for any signs of damage incurred in transit. It has undergone very strict quality control inspections and tests prior to packing. Thus it left the factory unmarred and in perfect operating condition. If the unit was shipped directly to you and you discover damage notify the transportation company without delay. Only you, the consignee, may institute a claim with the carrier for damage during shipment. However, the Marantz Company will cooperate fully with you in such an event. Save the carton as evidence of damage for their inspection. If you received the unit directly from a Marantz dealer, return it to him for adjustment.

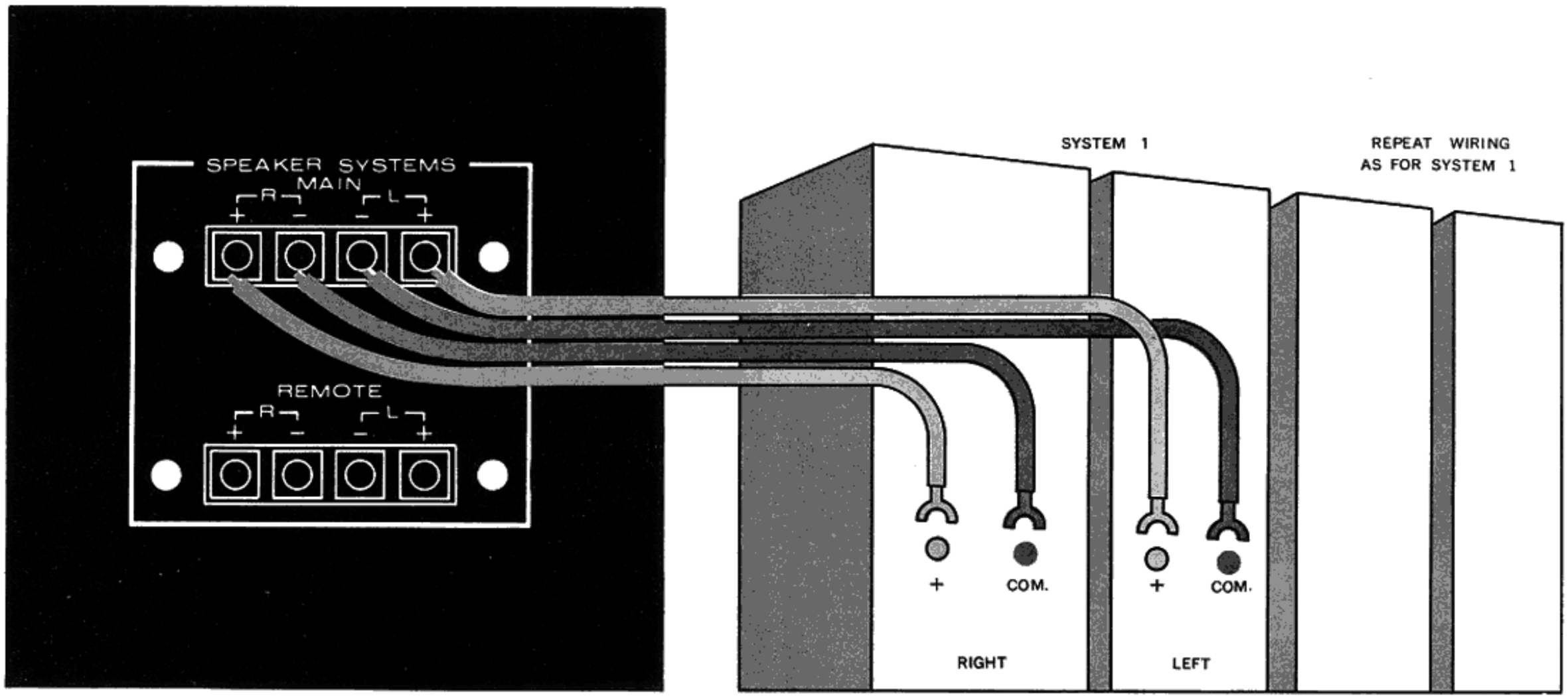


Figure 1. Loudspeaker System Connections

PREPARATION FOR USE

Rear panel Signal Connection

All signal connections to the Model 1060 should be made with shielded audio cables. Figure 2 shows the location of the input and output jacks on the rear panel. These are for "permanent" connections. Use of the front panel controls and jacks will be discussed later. A letter "L" corresponds to the left audio channel; a letter "R" to right audio channel. To avoid confusion, it is suggested that you connect one cable at a time between the Model 1060 and the other components of your system. This way, mixing up the channels or mixing up signal sources and destinations will be avoided.

The **SPEAKER SYSTEM (MAIN, REMOTE)** jacks on the left side of the rear panel will accomodate two loudspeaker systems; each speaker having a rated impedance between 4 and 16 ohms. When using only one pair of speakers, connect them to the terminals marked **MAIN.** The terminals marked **REMOTE** are used for connection a second pair of speakers in a location remote to the Model 1060.

Use care when connecting the Model 1060 to a loudspeaker which contains a built-in power supply—such as an electrostatic loudspeaker. The "common" speaker-connection terminal of these devices may be capacitively coupled through the power supply. Ensure that the (–) terminals of the model 1060 are connected to the "common" terminals of the loudspeaker system as shown in Figure 1. Ordinary #18 gauge two-conductor lamp cord may be used for distances of up to 30 feet between amplifier and loudspeakers. For longer distances, use #16 gauge wire or heavier, depending on length.

In connecting two loudspeakers for stereo operation, it is important to insure correct relative phasing (polarity). This is best acheived, when using identical loudspeakers, by simply coding each wire for identification, one wire in each pair should be coded at both ends with a knot, tape, etc. The coded wires can then be used for identical connections in each channel. For example, the coded wire in each pair can be connected to the "common" terminal of each loudspeaker and the (–) terminal of each amplifier channel. The uncoded wire of each pair is then connected to the remaining loudspeaker terminal and the remaining terminal on each amplifier channel (R and L). This procedure insures correct polarity or phasing of identical loudspeakers.

Note: Close inspection of standard zipcord will reveal some form of coding on the insulation (ridge or groove on one edge); or one of the wires may be tinned and the other wire not tinned.

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.

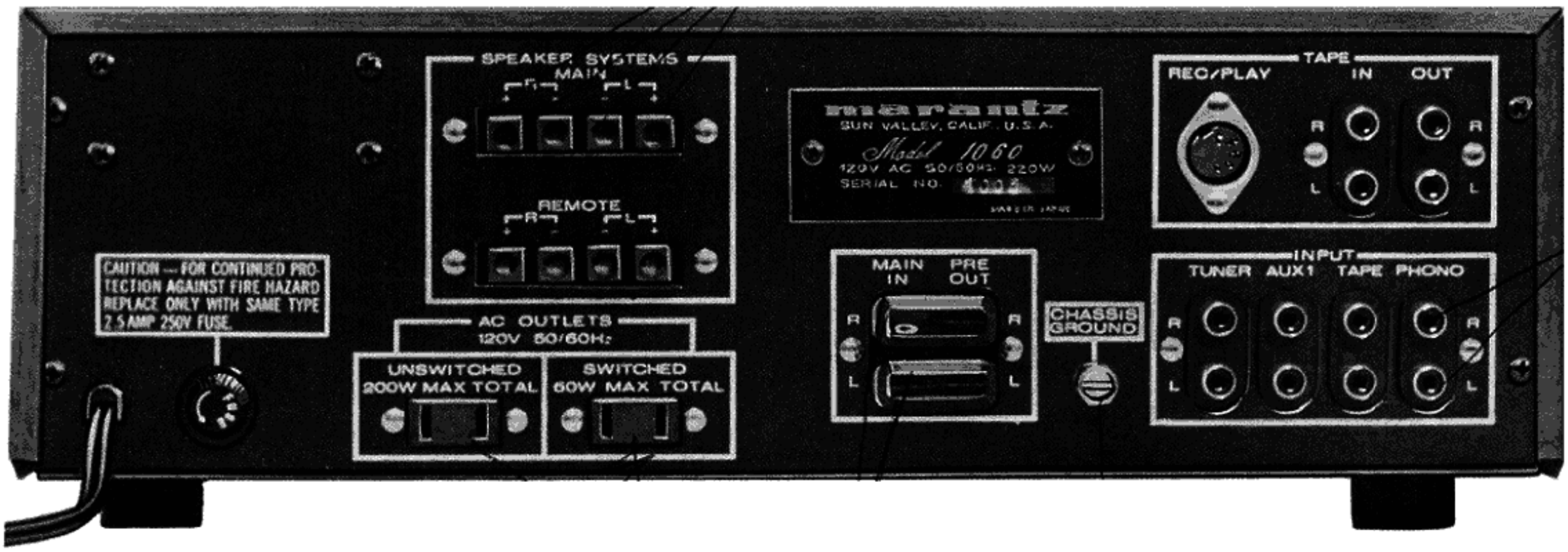


Figure 2. Rear Panel Connection Facilities

DIN Tape recorder jack **(REC/PLAY)**—The 5-pin DIN tape recorder jack on the rear panel permits use of European-type 5-wire tape recorder cables with similarly equipped tape recorders. This jack is connected in parallel with the TAPE IN and **TAPE OUT** jacks, but the polarizing pin in the plug assures proper phasing at all times.

TAPE OUT jacks—The signals available at this pair of jacks may be routed to your tape recorder and are affected only by the **selector** switch on the front panel.

TAPE IN jacks—With tape recorder pre-amplifier outputs connected to these jacks, signals from a tape recorder can be played through your system when the recorder is set for playback mode of operation and the **TAPE MON** switch is in the IN position.

AUX 1 jacks—These high level jacks provide for connecting miscellaneous sources such as tape players with self-contained playback preamplifiers, phono cartridges that provided RIAA equalized high-level output, or additional tuners or receivers, etc.

TUNER jacks—These high level jacks can be used for connecting a stereo or mono tuner to the Model 1060.

For stereo (multiplex) FM tuner reception, proceed as follows:

Connect a pair of audio cables between the tuner's right and left output jacks and the Model 1060's right and left jacks. Set the front panel **selector** switch to **TUNER**.

For monophonic FM or AM tuners, proceed as follows:

Connect one cable to either left or right **TUNER** jack. Set the front panel **selector** switch to **TUNER** and depress both **MONO IN (L,R)** pushswitches.

PHONO jacks—These jacks are for use with standard phono cartridges requiring a 47,000 ohm resistive load.

If hum is heard when playing records, it is evidence of inadequate grounding or shielding of your record player or connections. Connect a separate ground wire from the turntable or record changer frame to the **CHASSIS GROUND** binding post on the Model 1060. If the tone arm is mounted on a wood panel or is otherwise insulated from the frame, connect the arm's mounting base to the grounding wire with a short jumper. If the two pairs of signal wires in the arm have a single overall shield, connect the shield to the grounding wire, keep the two phono connecting cables and grounding wire closely together. In three-wire (common ground) systems, this will minimize "ground loops". If excessive phono hum persists, your phono cartridge may have a clip connecting the two "common" wires together, remove it.

TAPE jacks—(Do not confuse the **TAPE** jacks with the **TAPE IN** or **TAPE OUT** jacks.) An extra tape recorder can be connected to the **TAPE** jacks. When playing back with the tape recorder connected to the **TAPE** jacks, place the **selector** switch on the front panel in the **TAPE** position. The **TAPE** jacks are not affected by the **TAPE MON** pushswitch on the front panel.

PRE OUT jacks—These jacks deliver the output of the Model 1060 preamplifier circuits to the rear panel.

MAIN IN jacks—These are the input terminals of the power amplifier section of the Model 1060.

Note: The **PRE OUT** and **MAIN IN** jacks are normally bridged by two molded RCA type pin plug assemblies which are provided with each Model 1060. These assemblies must remain intact for normal operation of the unit. However, should you intend to use such equipment as a graphic equalizer, compressor/limiter, or expander, you may connect these instruments to your Model 1060 by removing the bridging connections from the rear panel **PRE OUT** and **MAIN IN** jacks and connecting appropriate length shielded audio cables from your Model 1060 to your processing equipment.

CHASSIS GROUND—This binding post provides a convenient "earth" ground point to eliminate possible ground loops between the Model 1060 and program sources.

Convenience Outlets—Two AC outlets on the rear panel are provided for powering associated components of your system, such as power amplifiers, tuners, tape recorders, record players, etc. The right one is controlled by the front panel **POWER** switch. The **UNSWITCHED** outlet is not controlled by the **POWER** switch. This outlet is for powering a turntable or record changer that has its own on-off switch.

OPERATION

Simplified Operating Procedures—When operating the Model 1060 Stereo Console for the first time, follow these simple directions, using Figure 3. Later on, you can take full advantage of the instrument's versatility by learning to use the remaining controls and adjustments.

Step 1. Turn the **volume** control all the way to the left (fully counter-clockwise), and set the **balance** control to mid-position.

Step 2. Set **MONO IN (L,R)** pushswitch to the OUT position.

Step 3. Set **TAPE NON** pushswitch to the OUT position.

Step 4. Set all **treble, mid** and **bass** controls to the center position.

Step 5. Depress the **POWER** switch. The pilot light at the right center of the panel will glow.

Step 6. Select the desired program source by turning the **selector** switch to the appropriate position—unless the desired program source is a recorded tape to be played by the taperecorder which is connected to the DIN type recorder jack or **TAPE IN** jacks. MIC, PHONO, TAPE, AUX 1 or AUX 2 may be selected, by the **selector** switch.

The **TAPE, TUNER** or **AUX 1** positions select the program sources connected to the corresponding input jacks on the rear panel.

mic/aux 2 jacks—These jacks accept the standard 2-conductor phone plug.

1. When one low level microphone (less than 100mV, such as a dynamic type) is connected to the "L" jack of the **mic/aux 2** jacks, place the **selector** switch in the **MIC** position. The sound can be heard through the left channel loudspeaker. In this case depress the **MONO IN (L)** pushswitch to listen the sound from both channel loudspeakers. If the microphone is connected to the **"R"** jack, depress the **MONO IN (R)** pushswitch to hear the sound through both channel speakers and release the **(R)** pushswitch to listen the sound through R channel speaker only.

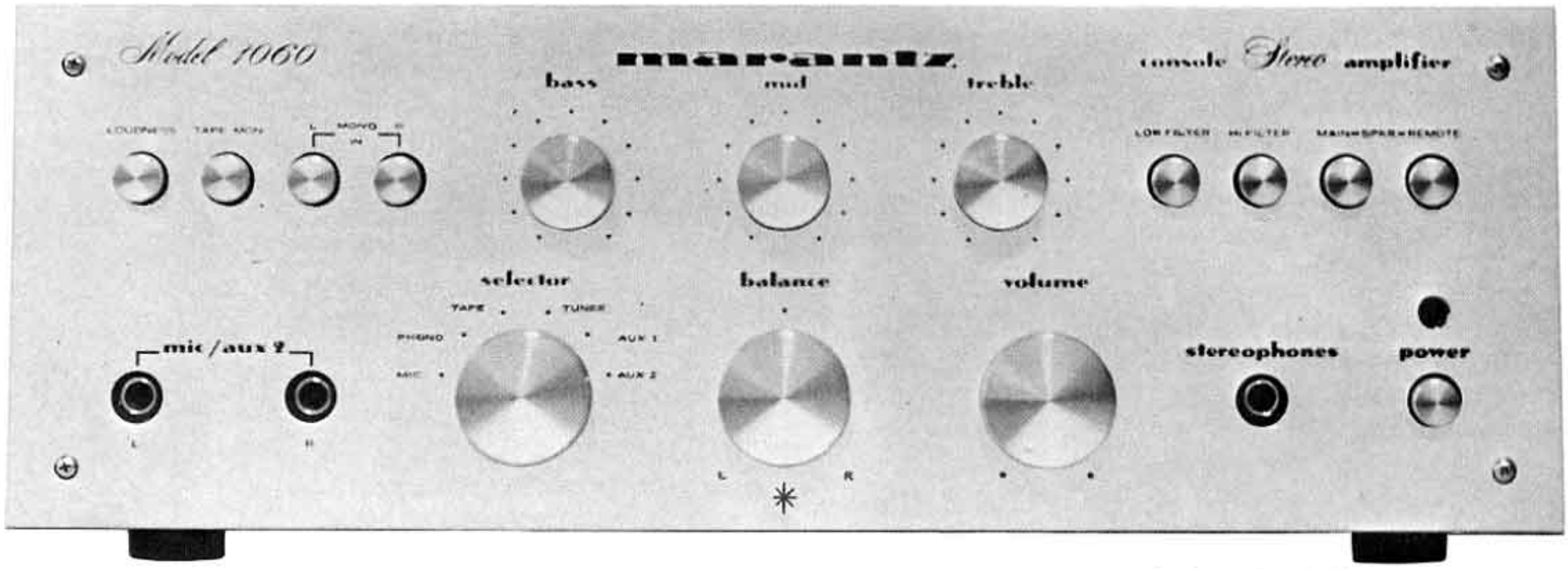


Figure 3. Front Panel Controls and Jacks

2. When two microphones are connected to the each **R** and **L** jack with the **MONO IN (L,R)** pushswitch in the normal OUT position, the sound can be heard in stereophonic mode. With the **MONO IN (L,R)** pushswitch depressed, the **L** and **R** channel sounds are mixed and heard in monophonic mode.

3. When high level signal sources (more than 100mV) are connected to the one or both **mic/aux 2** jacks, place the **selector** switch in the **AUX 2** position. Do not place the **selector** switch in the **MIC** position to avoid undesirable distortion due to signal overload.
   Signal source connected to the **"L"** jack is heard through the L channel speaker, if the **MONO IN (L)** pushswitch is not depressed, normal OUT position. If the (L) pushswitch is depressed, the sound can be heard through both left and right channel speakers.
   When two kind of high level signal sources are connected to the **"L"** and **"R"** jacks, keep the **MONO IN (L,R)** pushswitches in their normal OUT position for stereo operation and depress both the switches for mono operation.

volume control—This control maintains stereo balance within 3dB at all normal settings. It controls the level of both output channels simultaneously. It has no effect on the **TAPE OUT** jacks.

balance control—This control alters the level of either output channel in situations where it is necessary to correct unbalanced programs sometimes encountered in older stereo recordings, and in some present-day stereo broadcasts. As it is turned away from its center position, it decreases the level in one output channel while maintaining the level in the other channel.

bass, mid and **treble** controls—These controls alter the tonal balance of program signals to suit individual listening preference. Because each control is separate, it is possible to compensate for unbalanced room acoustics.

LOW FILTER Switch—This switch can be used to sharply reduce turntable rumble, low frequency noises, or "boomy exaggerated" bass. Obviously, use of the filter will reduce desired low frequency sounds as well as unwanted noises, therefore it should be used judiciously. The out position switches the filter out of the circuit.

Hi FILTER Switch—This switch can be used to sharply reduce high-frequency noises associated with the playing of poorly recorded tapes or old worn disc recordings. If an AM tuner is being used with the Model 1060, this switch will help considerably by eliminating the 10 KHz "whistle" effect. In the OUT position, the high-frequency filter is switched out of the circuits.

TAPE MON Switch—When this two-position switch is in its normal OUT position, the program source being heard or recorded is determined by the setting of the **selector** switch. In the IN position, only the program source connected to the **TAPE IN** jacks or **DIN** tape recorder jack on the rear panel is heard. However, the program source indicated by the **selector** switch continues to be fed to the **TAPE OUT** jacks. This facility permits you to feed any program source to your main tape recorder while you listen to the "results" of the recroding as it is in the progress.

LOUDNESS Switch—For more pleasing tonal balance at low level listening, the bass and treble should be boosted. With the **LOUDNESS** switch depressed, the bass and treble are automatically

boosted at low level listening and this tonal balance maintained.

MONO IN (L,R) Switch—Depressing both **MONO IN (L,R)** pushswitches will convert all input signals to the monophonic mode, including signals at the rear panel **TAPE OUT** and front panel **mic/aux 2** jacks.

While playing a single channel source such as TV or AM, depress both **MONO IN (L,R)** pushswitches to feed the signal through both channels.

When playing a monophonic phonograpn record, use these pushswitches to suppress rumble, common mode noise and pinch-effect distortion.

MAIN-SPKR-REMOTE Switch—These switches select the loudspeaker terminals to which audio power is fed. Either the MAIN or the REMOTE pair of loudspeakers may be selected individually, or both loudspeaker systems may be selected simultaneously. When both switches are set in normal OUT position, all loudspeaker terminals are internally disconnected from the power amplifier section of the Model 1060. The stereophone jack, however, is always connected and is not affected by these switches.

POWER Switch—This switch applies AC power to the Model 1060 and to the **SWITCHED** convenience outlets when depressed. When depressed again, AC power is removed.

stereophones—This jack is internally connected to the left and right outputs. The sterephones jack is designed for use with professional stereo headphones. Two sets of headphones may be used with the aid of "Y" connection. However, it must be cautioned that a parallel connection of two low impedance headphones results in a 3 dB loss in level. A series connection will provided more power for this purpose. Higher impedance phones may be easily connected in parallel.

Some Suggestions on Using Tape Recorders With Your Model 1060

There are several ways to connect and operate tape recorders with the Model 1060. To avoid confusion in the following discussion, references to "tape monitoring" assume the recorder is equipped with separate record and playback heads and separate record and playback preamplifiers. To further simplify this discussion, a tape recorder usually connected to the DIN tape recorder jack or **TAPE IN** and **OUT** jacks on the rear panel will be referred to as the "main" recorder; a separate recorder usually connected to the rear panel **TAPE** jacks will be referred to as the "external" recorder. This general arrangement is shown in Figure 4.

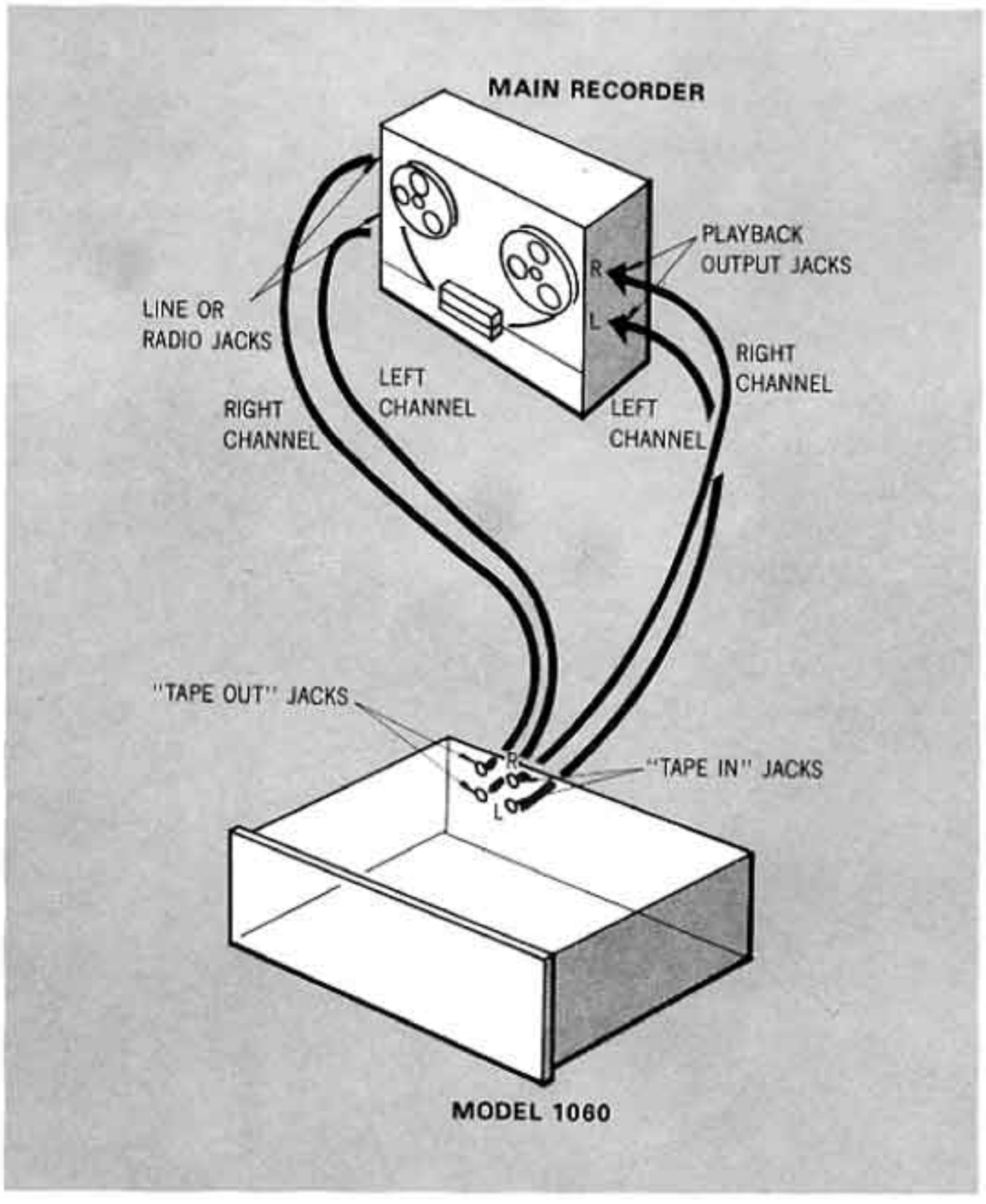
Recording and Playback—The simplest system involves only one tape recorder, whose line or "radio" inputs are connected to the **TAPE OUT** jacks on the rear panel of the Model 1060, and whose playback outputs are connected to the **TAPE IN** jacks.

To make a recording, set the **selector** switch to the desired program source and set the recorder to "record." With the **TAPE MON** switch in the OUT position, you can listen to the original program source. By setting the **TAPE MON** switch to the IN position, you can listen to (monitor) the "results" of the recording while it is in progress.

Copying and Editing

Using the input/output and control facilities of the Model 1060, and two tape recorders, you can copy and edit tapes from one machine to the other. The general arrangement of the equipment for copying

Figure 4. One Tape Recorder Arrangement for Recording and Playback



LOW FILTER—The function of the **LOW FILTER** switch is to switch in or bypass the low filter. The low filter provides 6 dB or foll off per octave, as shown in Figure 8. Cutoff frequency is about 100 Hz.

HIGH FILTER—The high filter operates in the same manner as the low filter with cutoff frequency of 3.5 KHz, as shown in Figure 8.

Amplifier—The amplifier section of the Model 1060 provides 30 watts RMS output per channel (with both channels driven into 8 ohms) to the speaker systems.

MAIN-SPKR-REMOTE switches—These switches allows a choice of three possible combinations for routing the audio output of the Model 1060, **MAIN REMOTE** or **BOTH** systems. The stereophone jack remains connected at either or both pushswitch(es) are depressed or not.

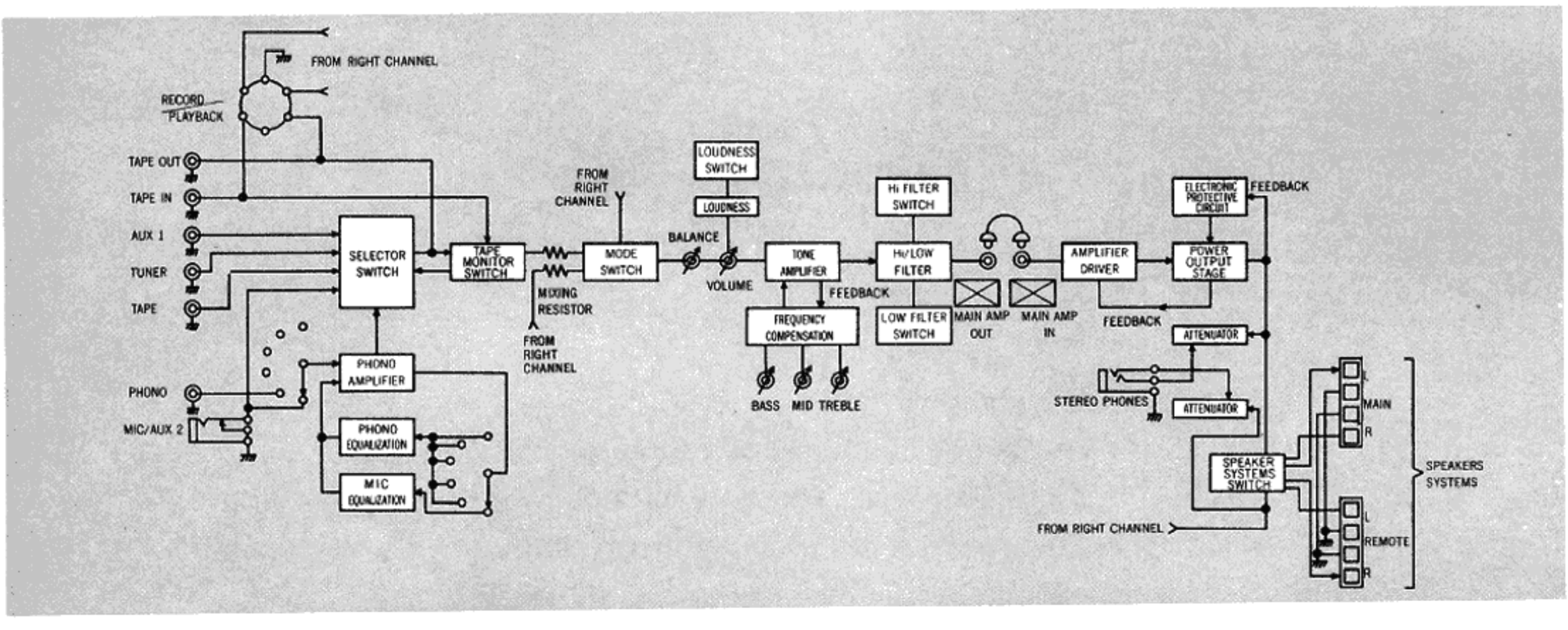


Figure 6. Functional Block Diagram

GENERAL REQUIREMENTS

Power Requirement	120 V AC 50 to 60Hz
At rated output both channels operating	190 watts
Idling Power (volume control at zero)	48 watts
Dimensions—Panel width	14-11/64 inches
Panel Height	4-23/32 inches
Depth	11-1/32 inches
Weight—Unit alone	18 lbs
Packed for shipment	25.3 lbs

* These specifications and exterior designs may be changed for improvement without advance notice.

SERVICE NOTES

REPAIRS

Only the most competent and qualified service technicians should be allowed to service the Marantz Model 1060 Audio Amplifier. The Marantz Company and its warranty station personnel have the knowledge and special equipment needed for the repair and calibration of this precision instrument.

In the event of difficulty, write directly to the factory (to the attention of the **technical service department**) for the name and address of the nearest Marantz warranty or authorized service station. Please include the model and serial number of the unit together with a description of the problem.

If it should ever be necessary to ship the unit to the factory or authorized service station, and your amplifier is mounted in its accessory walnut cabinet, **ALWAYS REMOVE IT FROM THE CABINET BEFORE PACKING.**

DO NOT SHIP THE ACCESSORY WALNUT CABINET.

Pack the unit carefully, using the original packing material. If the packing material has been discarded, lost, or damaged, write to the factory (to the attention of the **technical service department**) for new packing material. Carton, fillers, and packing instructions will be shipped to you at a nominal charge. No Amplifier should be returned to the factory without an Authorized Return Label which the Marantz company will supply if the description of difficulties appears to warrant factory service.

Please Pack the Amplifier as Illustrated.

CAUTION

Please **DO NOT** ship your Amplifier mounted in its accessory walnut cabinet.

Insure Amplifier for full value:

Make sure that your correct return address is on shipping label.

Ship via a reputable carrier. **DO NOT USE PARCEL POST**—Be sure to obtain receipt from carrier.

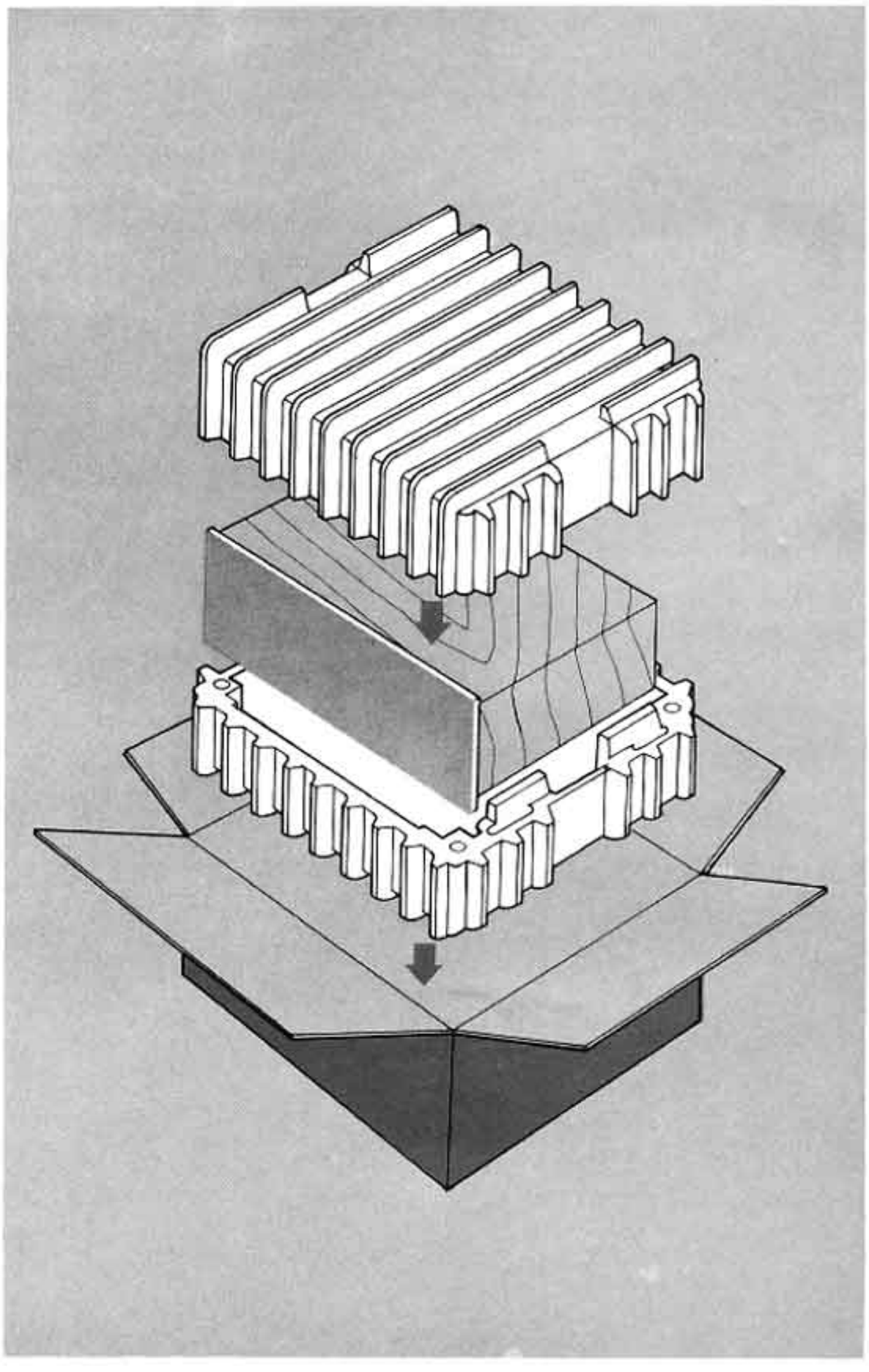


Figure 7. Packing Instructions

The Sound of Marantz
is the compelling warmth of a Stradivarius.
It is a dancing flute, a haughty bassoon
and the plaintive call of a lone French horn.
The Sound of Marantz is the sound of beauty,
and Marantz equipment is designed to bring you
the subtle joy of its delight.
Wonderful adventures in sound await you
when you discover that the Sound of Marantz
is the sound of music at its very best.

Zuhause