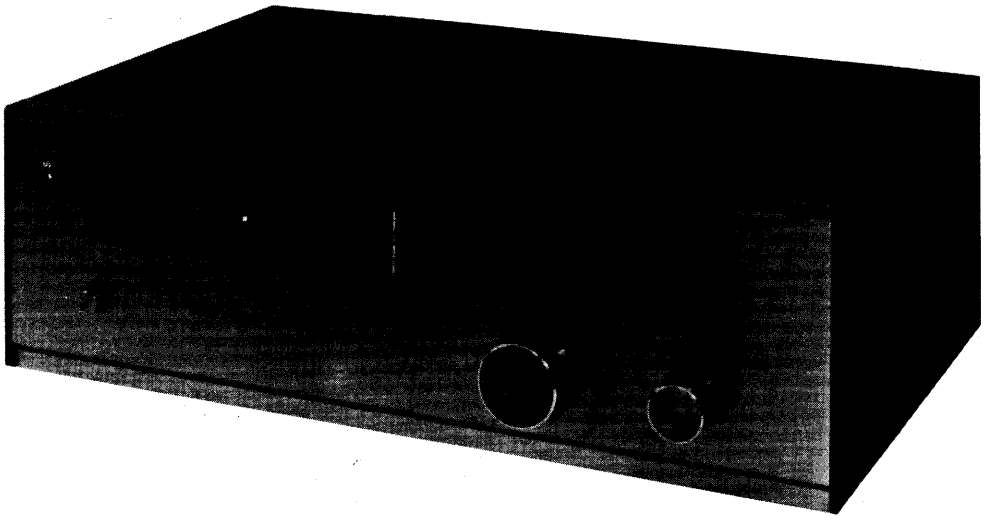

owner's manual

Solid State AM/FM Stereo Tuner

RT-222

INTRODUCTION

We would like to take this opportunity to thank you for purchasing our Stereo Tuner. With the high quality design and workmanship that goes into making this equipment, you can be assured of its flawless performance for many years to come.

We have fitted every control and feature you could conceivably need. Designed for both versatility and ease of operation, this piece of equipment will add professional studio flexibility to your Hi-Fi sound center. The performance is exceptional; it will allow you to experience true high fidelity as never before. Its full and natural stereophonic reproduction offers you musical entertainment approaching that of live performances. We sincerely hope you will treasure this professional equipment. In order to obtain the maximum use out of your unit, please read the following pages of this Owner's Manual carefully.

Do not attempt to operate the unit until you have made all the necessary connections.

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FRONT PANEL CONTROLS

TUNING METER
This tuning meter is used to indicate if the tuner has tuned in to broadcasts. The tuning knob is turned until the pointer shows maximum deflection to the right.

FM STEREO INDICATOR
The indicator lamp lights up automatically when the tuner receives an FM stereo program. The lamp turns off automatically when the broadcast is switched over to a monaural operation.

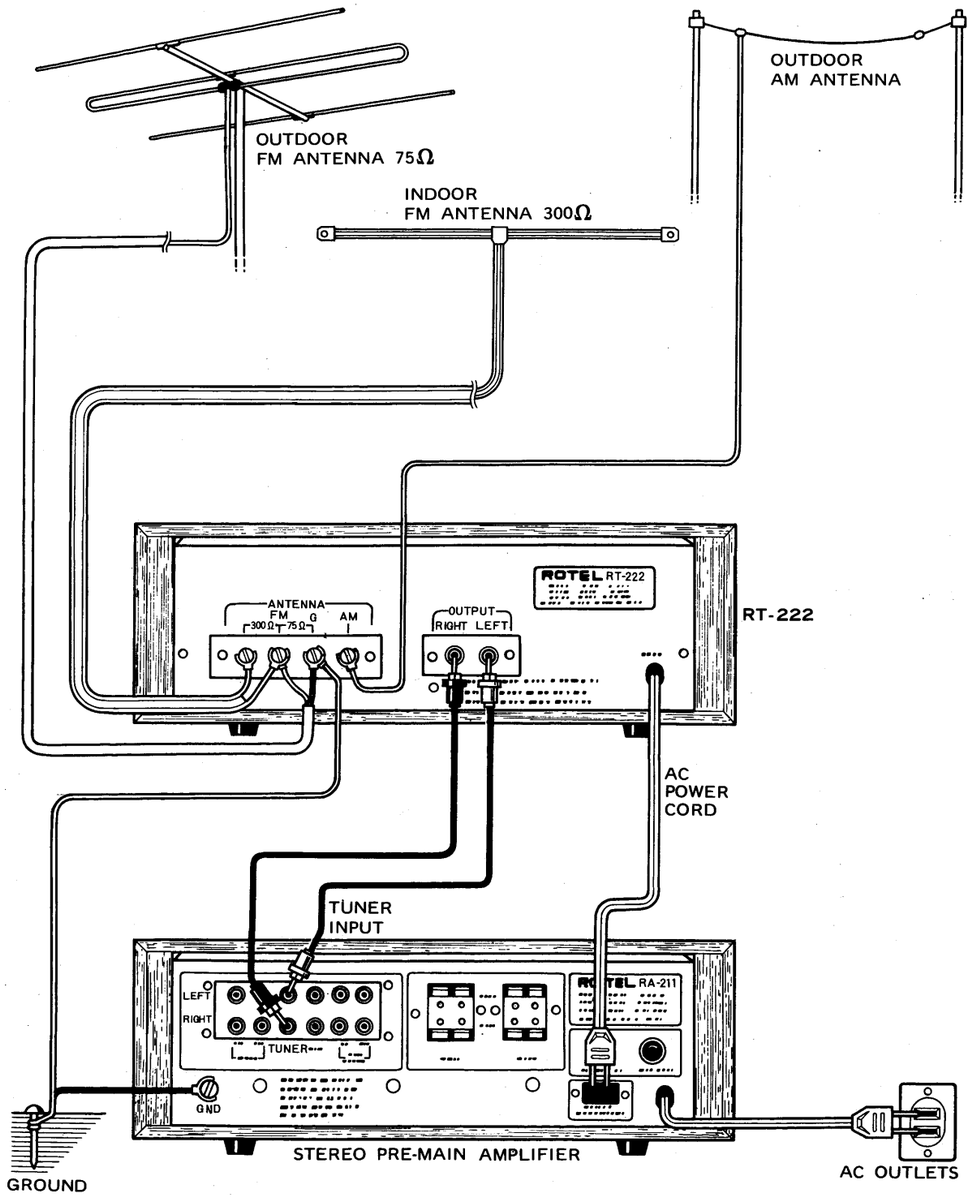
DIAL SCALE
The upper scale is for FM broadcast (88-108 MHz), the lower for AM broadcast (535-1,605 KHz).

POWER SWITCH
The button is pressed to switch on the tuner. Another push turns off the tuner.

TUNING KNOB
This knob is turned to tune in the desired AM or FM broadcasting station.

SELECTOR SWITCH
This switch is set to position AM for reception of AM broadcasts and to position FM for FM broadcasts. With the selector switch set to position FM STEREO, FM monaural/stereo switchover takes place automatically and the stereo indicator lamp indicates reception of stereo programs.

REAR PANEL CONNECTIONS



INSTALLATION

IMPORTANT: Do not apply power to this unit without first making sure that all the necessary connections are properly made.

AM ANTENNA

This tuner is provided with a built-in high sensitivity ferrite bar antenna which makes it possible to receive AM stations without the use of an outdoor antenna.
When using this tuner at a place distant from broadcasting station or in a ferro-concrete building, where reception may not be satisfactory, connect a wire antenna to terminal AM and extend it outside the house.

FM ANTENNA

An FM antenna is required for optimum reception of the very high FM radio frequencies. The FM terminals on the rear panel of this unit are for the connection of an FM antenna. Proper care should be taken in the selection and installation of a good FM antenna.

RECEPTION OF LOCAL FM STATIONS

When using Model RT-222 near the broadcasting station and inside an ordinary building, the supplied indoor FM antenna will be sufficient for good reception. It can be connected to the ANTENNA terminals (FM 300Ω). Spread out the horizontal section of the antenna and determine its direction for maximum sensitivity. Fix the horizontal section on a wall or other place in the determined direction.

RECEPTION OF DISTANT FM STATIONS

When using the tuner at a place distant from broadcasting station or in a ferro-concrete building, you may need an outdoor antenna installed for best results.
FM antennas are classified into two groups; 300Ω balanced and 75Ω unbalanced. Usually, a 300Ω feeder line is used as a lead-in wire. In this case, the terminals (FM 300Ω) are used for connection of the lead-in wire.
When a 75Ω coaxial cable is used as a lead-in wire, its connection should be made to the terminals (FM 75Ω).

INSTRUCTION FOR CONNECTIONS

CONNECTION TO STEREO AMPLIFIER

Connect the tuner output cables, available from the output terminals on the rear panel, to terminals TUNER or AUX of the stereo amplifier.
Make sure that the LEFT output is connected to the LEFT input, and the RIGHT output to the RIGHT input of the stereo amplifier.

GROUNDING

When using an outdoor antenna, connect to terminal GND a vinyl or enameled ground conductor wire leading to the earth. For this purpose fix a piece of copper to the grounding conductor and bury the piece deep in the earth.

OPERATION

PRELIMINARY CHECK: If the dial scale has failed illuminate, remove and check the AC fuse. If the fuse is blown, check possible reasons for the blow-out (e.g. defective AC power cord, etc.) and replace the fuse with same rating-type fuse.

1) Set the selector switch to position AM.
2) Turn the tuning knob and tune in to the desired broadcasting station.

FM STEREO BROADCAST

1) Set the selector switch to position FM STEREO.
2) Turn the tuning knob to tune in to the desired broadcasting station. Watch the tuning meter for proper tuning.

If the FM station is too far away and reception of stereo broadcast is unstable, set the selector switch back to position FM for monaural but improved reception.

FM MONAURAL BROADCAST

Set the selector switch to position FM. When the broadcast has changed to a monaural program after reception of a stereo program in the FM STEREO position, set the selector switch to position FM to enjoy a stable reception.

INSTRUCTION FOR USAGE

CONNECTIONS TO THE TERMINALS

Take care to make good connections of RCA-type plugs to the output terminals and lead wires to the antenna terminals. Their improper connections or accidental connections to other parts will cause an abnormal operation or noises.

PLACE FOR LOCATION

Model RT-222 is designed with due considerations for heat radiation. However, it should not be installed in an airtight cabinet or exposed for long period of time near heat sources.

SPECIFICATIONS

FM	Sensitivity	4 μV
	Frequency Range	88 - 108 MHz
	Harmonic Distortion	0.5%
	Signal to Noise Ratio	63 dB
	Capture Ratio	5 dB
	Selectivity	20 dB
	Stereo Separation	35 dB at 1 kHz
	Image Rejection	40 dB
	IF Rejection	60 dB
	Spurious Response Rejection	60 dB
	Antenna Impedance	300 Ω balanced 75 Ω unbalanced

AM	Sensitivity (IHF)	250 μV/m
	Frequency Range	535 - 1605 kHz
	Image Rejection	50 dB at 1 MHz
	IF Rejection	40 dB at 1 MHz
	Signal to Noise Ratio	50 dB
	Selectivity	30 dB
	Dimensions	13"(W) x 6-1/2"(D) x 4"(H)
	Weight	7 lbs/3 kg

Note: features and specifications subject to changes for improvement without notice.

MEMO

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