

owner's manual

Solid State AM FM Steree 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 ex-

perience 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

POWER SWITCH

the tuner.

The button is pressed to switch on

the tuner. Another push turns off

TUNING METER DIAL SCALE **FM STEREO INDICATOR** This tuning meter is used to indi-The upper scale is for FM broadcast The indicator lamp lights up autocate if the tuner has tuned in to matically when the tuner receives (88-108 MHz), the lower for AM broadcasts. The tuning knob is broadcast (535-1,605 KHz). an FM stereo program. The lamp turned until the pointer shows turns off automatically when the maximum deflection to the right. broadcast is switched over to a monaural operation.

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This knob is turned to tune in the

desired AM or FM broadcasting

TUNING KNOB

station.

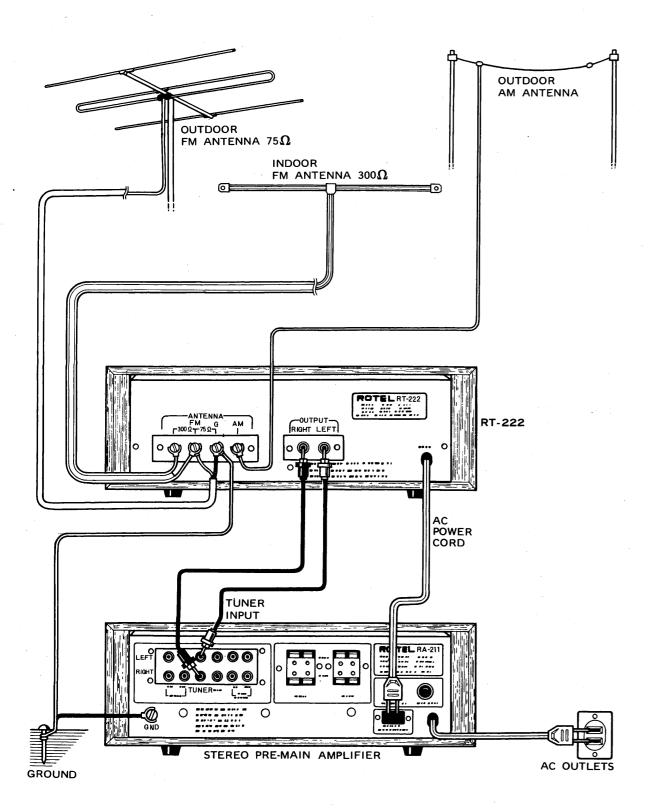
SELECTOR SWITCH

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.



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 $300\,\Omega$). 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; $300\,\Omega$ balanced and $75\,\Omega$ unbalanced. Usually, a $300\,\Omega$ feeder line is used as a lead-in wire. In this case, the terminals (FM $300\,\Omega$) are used for connection of the lead-in wire.

When a $75\,\Omega$ coaxial cable is used as a lead-in wire, its connection should be made to the terminals (FM $75\,\Omega$).

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	
	Image Rejection	
	IF Rejection	60 dB
	Spurious Response Rejection	
	Antenna Impedance	300Ω balanced 75 Ω unbalanced

AM	Sensitivity (IHF)	250 µV/m
	Frequency Range	•
	Image Rejection	
	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.

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