MODEL 394 AM-FM TUNER - AMPLIFIER INSTRUCTION MANUAL

BE SURE TO KEEP THIS INSTRUCTION BOOKLET AVAILABLE FOR READY REFERENCE

Model 394 is a complete Hi Fidelity receiver having an ultra-sensitive AM-FM Tuner with AFC and a Hi-Fidelity 15-watt amplifier. The unit has a tape out jack, a crystal phono input jack and an additional jack for attachment to a Multiplex Converter. It also has speaker output for 4, 8, 16 ohms as well as 25 and 70 volt line.

UNPACKING:

The unit is to be removed carefully from the carton and inspected for any possible damage in transit. If there is any evidence of any damage which might have occurred in shipment, notify your dealer at once, or the transportation company which delivered it. Claims for damage sustained in transit must be made upon the Carrier. Save all packing material for inspection by the claim agent who will furnish you with the proper forms and will also, give you the necessary instructions for filing a claim. In addition to the Unit, there should be included in the carton the following:

1. INSTRUCTION BOOKLET

2. WARRANTY CARD

To insure proper servicing and to protect your rights under the warranty, be sure to fill in the warranty registration card without delay and mail to the factory.

WARRANTY

Your RAYMER unit has been very carefully inspected and tested at the factory and normally should require no service other than a semi-annual check of the tubes. Each unit is warranted to be free from defects in material and work-manship under normal use and service for a period of 90 days from date of delivery to the original purchaser. If any unit appears to be defective, the factory will repair any unit returned within said 90 days, providing all transportation charges are pre-paid, and which our examination shall disclose to our satisfaction to be defective.

This Warranty does not include free labor, nor is it applicable to any unit which shall have been subject to accident, tampered with, mis-used, abused, or altered in any manner whatsoever. Further, this Warranty shall not apply to any unit which has been connected improperly.

It is recommended that any Tuner on which service is required, be processed through your dealer wherever possible.

This Warranty is expressly in lieu of all other Warranties, expressed or implied, and of all other obligations or liabilities on our part. We neither assume nor authorize any other person to assume for us any other liability in connection with the products manufactured by Trutone Electronics, Inc.

INSTALLATION:

Because of its attractive appearance, Model 394 Tuner-Amplifier may be placed on a table or a book shelf. Altho the unit has ample vents for normal ventilation, sufficient space should be allowed around it to permit free air flow.

Do not put books or other objects on top of the unit as this would reduce the ventilation and result in reducing the life of the components and tubes.

If installed in a cabinet, the cover is to be removed, and ample ventilation must be allowed around the unit.

Model 394 Tuner-Amplifier is designed to operate on a 110 to 120 Volt, 60 cycle A.C. line.

The screw terminals for connection to the speaker or a 25 volt or 70 volt line are located on the rear of the chassis at the right. Any ordinary insulated wire, such as parallel lamp cord, is suitable for hooking up the unit directly to the speaker voice coil. When using the 25 or 70 volt line, a 2-conductor twisted speaker cable is preferable.

DO NOT TURN THE UNIT ON UNTIL THE SPEAKER HAS BEEN CONNECTED.

The TAPE OUT jack is clearly marked and is to be used when it is desired to by-pass the internal amplifier and connect to an external amplifier for greater power. It can also be used to feed the signal from the Tuner to a tape recorder which has a built-in pre-amplifier.

The Multiplex jack can be used for connecting to a Multiplex Converter to receive simultaneous signals on both FM and Multiplex broadcast, and for Multiplex Stereo Reception.

The crystal phono input jack enables the amplifier in the unit to be used for playing of records, using a crystal or ceramic cartridge.

After the speaker has been connected, turn the set on by placing the switch to the "ON" position. The knob at the extreme left controls the various functions and can be turned for either AM, or FM reception, or in the event that a phonograph is to be played through the amplifier, then the knob must be turned to the "PHONO" position. When in this position, no reception from either AM or FM can be obtained. The knob at the right is used to tune the desired station for either AM or FM reception.

The "BASS" and "TREBLE" knobs are to be set with the marking in a vertical position for flat response. These controls can either boost or reduce the bass and treble of the amplifier. The bass and treble controls should be adjusted to suit the listener to compensate for room and speaker characteristics.

The center marking on the dial glass is a "LOG" scale for easy recording of the position of the pointer for any specific station.

AFC refers to "Automatic Frequency Control" and is an electronic means of keeping the receiver properly tuned to the F.M. Broadcasting station. Even if the F.M. Tuner Pointer is not in the exact center of the channel, the AFC will automatically pull in the station to the proper point. However, in tuning a weak station adjacent to a strong one, even if the AFC is in an operating position, it may lock on the stronger signal. It is for this reason that a selector switch has been provided for the disabling of the AFC.

For normal operation, the "AFC" selector switch should be left in the "ON" position. For very precise tuning, or for tuning a weak station next to a powerful station on FM, it is suggested that the "AFC" selector switch be set to the "OFF" position until the station is received the loudest. The switch is then to be moved to "ON" position and the station will be properly tuned and locked in position.

For normal FM reception, a built-in line cord antenna is sufficient for most locations. In the event that the unit is located in a remote area, an external Dipole antenna will increase the efficiency and a number of distant stations can then be received. This external antenna is to be connected across the terminals marked "ANT" and "GND".

For AM reception, Model 394 has a built-in Hi Q Ferrite loopstick antenna which is all that is normally required for most AM reception.

To increase the reception of the weak AM stations in the fringe area, it may be advisable to rotate the Tuner to obtain the loudest signal.

CAUTION

This unit is provided with a 1½ ampere fuse for the protection of the components used in the circuitry. If the fuse should blow, replace it with one of identical amperage and under no circumstances with one of greater amperage. If the replacement fuse should blow, replace the rectifier, which normally will correct the difficulty. If the fuse continues to blow out even with a new rectifier, return the amplifier to the factory for warranty repair or replacement.

