#### INSTRUCTION MANUAL

# MODEL 532 FM STEREO MULTIPLEX TUNER

# INSTALLATION AND OPERATION INSTRUCTIONS

Model 532 is a High Fidelity ultra-sensitive FM stereo multiplex tuner, which should be used in connection with a high-grade high fidelity stereo amplifier. Features include positive-action AFC and a stereo "beacon" light. It is supplied with a Power "Off-On" switch, a "Stereo-Monaural" (Mode) switch and an AFC "Off-On" switch.

## 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

This 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 workmanship 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 unit 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 532 Tuner may be placed on a table or a book shelf. It should be placed alongside or under the amplifier but not on top of it, as undue heat will affect the stable operation of the circuitry.

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.

Plug the AC line cord in any outlet furnishing 105 to 120 volts, 60 cycle AC.

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### CONNECTIONS

FOR STEREOPHONIC RECEPTION two shielded cables (patchcords) are required. One end of the first patchcord is plugged into the "Left" jack of Model 532 and the other end into the "Left" input jack of the amplifier. One end of the second patchcord is plugged into the "Right" jack of Model 532 and the other end into the "Right" input jack of the amplifier. The MODE switch on the front panel must be turned to the "MPX" position.

FOR MONAURAL RECEPTION plug one end of a shielded cable (patchcord) into either the "Left" or "Right" jack of Model 532 Tuner, and the other end into the input jack of the monaural amplifier. The MODE switch on the front panel must be turned to the "MON" position.

# **OPERATION**

On the front panel of the tuner are located a tuning control, a Power "Off-On" switch, a Stereo-Monaural (MODE) switch, and an AFC "Off-On" switch.

AFC refers to "Automatic Frequency Control", and is an electronic means of keeping the tuner properly tuned to the FM broadcasting station. Even if the tuner pointer is not in the exact center of the channel, the AFC will automatically pull in the signal to the proper point. However, in tuning in a weak station adjacent to a stronger one, if the AFC is in the "on" position, it may "lock on the stronger signal". It is for this reason that a means has been provided for disabling the AFC. This is accomplished by using the AFC slide switch at the upper left on the front panel.

For normal operation, the AFC slide switch should be placed at 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 switch be placed in the "off" position until the station is received the loudest. The switch is then to be moved to the "on" position and the station will be properly tuned and locked in position. The same procedure is very important especially when tuning in stereo multiplex programs so as to obtain maximum stereo separation.

FOR STEREO MULTIPLEX RECEPTION: On your stereo amplifier turn the Function switch to the AUX or TUNER position, and the Stereo-Monaural switch to the STEREO position.

On Model 532 Tuner turn the Power "Off-On" switch to the "On" position. Turn the MODE switch to the MPX position. When a station broadcasting a stereo multiplex program is tuned in, the stereo station indicator light at the upper left of the front panel will glow.

PLEASE NOTE: The stereo station indicator light will sometimes glow on stereo stations even when they are broadcasting monaural programs. This light will also flicker on some stations when the tuner is operating in a noisy location, or when the broadcasting station has strong audio "peaks", or when tuning from station to station. The light will remain constant only when a stereo station is correctly tuned in.

FOR MONAURAL RECEPTION: On your stereo amplifier turn the Function switch to the TUNER or AUX position and the Stereo-Monaural switch to the MONAURAL position. On Model 532 Tuner turn the MODE switch to the "MON" position. Turn the POWER "Off-On" switch to the "On" position.

It is always advisable for the MODE switch to be in the MON position when listening to monaural programs so as to avoid background noises that are sometimes present when the MODE switch is in the MPX position on monaural programs.

# ANTENNA

If when using an inside antenna a "bubbling" sound is heard, this indicates a weak signal and therefore it will be necessary to use an outside antenna so that all stations broadcasting stereo multiplex are heard clearly.

Although in strong signal areas Model 532 will operate satisfactorily with a 4 foot wire connected to the antenna terminal, the use of an outside antenna is recommended for best results at all times.

# SERVICE ADJUSTMENT

If a growling or bubbling sound is heard in the background of a stereo multiplex program, the multiplex oscillator coil (marked with a red dot) should be adjusted. Using a screwdriver turn the iron core a very small amount in either direction until the bubbling sound disappears.

Do not attempt to adjust any of the other coils. These coils are precisely adjusted at the factory and should not require attention unless parts are replaced.

