

INSTRUCTION MANUAL**MODEL 641 FM TUNER****INSTALLATION AND OPERATION INSTRUCTIONS**

Model 641 is a High Fidelity extra-sensitive FM Tuner complete with AFC and should be used in connection with a high-grade high-fidelity audio amplifier. It may also be used effectively in installations employing wireless microphones and wireless guitars which operate on the 88-108 mc band. The Tuner has an audio output jack and an additional jack for attachment to a Multiplex Converter.

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 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, the Tuner may be placed on a table or a bookshelf. If installed in a cabinet, the cover is to be removed, and ample ventilation must be allowed. Model 641 Tuner is designed to operate on a 110 or 120 volt, 60 cycle A.C. line.

TRUTONE ELECTRONICS, INC.**14660 Raymer St. • Van Nuys, Calif.**

All connections are provided at the bottom of the unit. When the tuner is to be used for ordinary FM reception, one end of a proper patch cord is to be connected into the audio jack and the other end inserted in the input jack of the audio amplifier, which is usually designated as a "Radio" or "Tuner". 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 unit is to be plugged either in the AC receptacle at the rear of the amplifier or in the event the amplifier does not have an A.C. receptacle, insert in any 110 volt A.C. outlet.

The front of the Tuner has three operating controls: the slide switch at the lower left is to turn the set on by placing the switch in the "on" position; the switch at the upper left is used to disable the "AFC"; the knob at the right is used to tune the desired station.

AFC refers to "Automatic Frequency Control", and is an electronic means of keeping the receiver properly tuned to the FM broadcasting station. It should be used only when the selector knob is set for FM reception. 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 operation 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 switch at the right as indicated below.

For normal FM radio operation the AFC 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 AFC 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.

For normal FM radio reception, a short antenna lead 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"

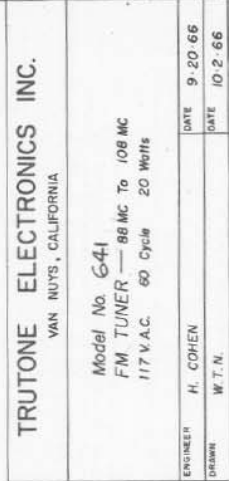
The lower marking on the dial glass is a "LOG" scale for easy recording of the position of the pointer for any specific station.

When the Tuner is to be used with a wireless microphone or wireless guitar, one end of the patchcord is connected to the input of the amplifier marked "Radio" or "Tuner", and the other end to either the "Audio" or "MPX" jack of the Tuner. When the "Audio" jack of the Tuner is used, the sound of the microphone or musical instrument will be deeper due to the 75 micro-second de-emphasis circuitry. When the "MPX" jack is used, however, the tone will be higher pitched and crisper because of flat response circuitry.

For optimum tuner performance with a wireless microphone or wireless guitar the following operating procedure is recommended. Using a very short antenna adjust the Tuner to a position on the dial, preferably at the lower end of the scale, at which no FM broadcasting station is operating. Note the position on the "Log" scale of the dial for easy reference. Turn on the microphone or guitar transmitter using the smallest possible antenna. Adjust the frequency of the transmitter to that of the Tuner. Turn AFC switch on the Tuner to "off" position. Adjust the Tuner carefully to the transmitter frequency. Turn AFC switch on the Tuner to "on" position, which will lock on transmitter frequency. Install normal antenna on both the Tuner and the transmitter.

TRUTONE ELECTRONICS, INC.

14450 Highway 21, Van Nuys, Calif.



Model No. 641
FM TUNER — 88 MC To 108 MC
117 V.A.C. 60 Cycle 20 Watts

ENGINEER	H. COHEN	DATE	9-20-66
DRAWN	W. T. N.	DATE	10-2-66