

**MODEL 482A BACKGROUND MUSIC SYSTEM****INSTRUCTION MANUAL**

**BE SURE TO KEEP THIS INSTRUCTION BOOKLET AVAILABLE FOR READY REFERENCE**

**GENERAL DESCRIPTION**

Model 482A Background Music Tuner-Amplifier consists of a High Fidelity ultra sensitive FM Tuner, complete with AFC, and a 7 watt audio amplifier with microphone preamplifier. The unit has a "tape out" jack, a crystal phono jack, a Multiplex Converter jack, and a high impedance microphone jack. It also has speaker outputs for 8 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**

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 482A Background Music System may be placed on a table or a book shelf. Although 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 an enclosure, the cover is to be removed, and ample ventilation must be allowed around the unit.

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

**TRUTONE ELECTRONICS, INC.**

14660 Raymer St. • Van Nuys, Calif.

## CONNECTIONS

The screw terminals for speaker connection are located on the right at the rear of the chassis. Any ordinary insulated wire, such as parallel lamp cord, is suitable for hooking up the unit to the voice coil terminal of a speaker. A number of speakers can be used by connecting them in parallel, or series parallel, to form an impedance of 8 ohms; they may also be connected to the 25 or 70 volt line when using a 25 or 70 volt line transformer at each speaker.

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".

**DO NOT TURN ON THE UNIT UNTIL THE SPEAKERS HAVE BEEN CONNECTED TO THE TERMINAL STRIPS AS POSSIBLE DAMAGE TO THE EQUIPMENT MAY OCCUR.**

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.

The microphone input jack is used for connection to any high impedance microphone for paging or public address purposes. Where a low impedance microphone is to be used, the RAYMER 311 microphone transformer or equivalent should be plugged in the microphone input jack of the receiver.

A special 5 prong socket is provided on the chassis for connection to RAYMER Model 310 Remote Control Relay, whenever remote microphone paging is desired.

## OPERATION

The front panel has three knobs and two slide switches. The functions of the knobs are as indicated. The Microphone Volume Control knob adjusts the level of sound for paging or public address, and is independent of the Tuner volume control knob. The Tuner Volume Control knob is used to adjust the level of the sound of the FM portion or phono. The Tone Control Knob can be turned to the position that is most pleasing to the listener as it affects both the high and low frequency response. The Tuning knob is to select the desired FM station. The Function Control knob is used to select microphone, radio, or phono. The slide switch at the lower left is to turn the unit on or off. The slide switch at the lower right is used for AFC defeat.

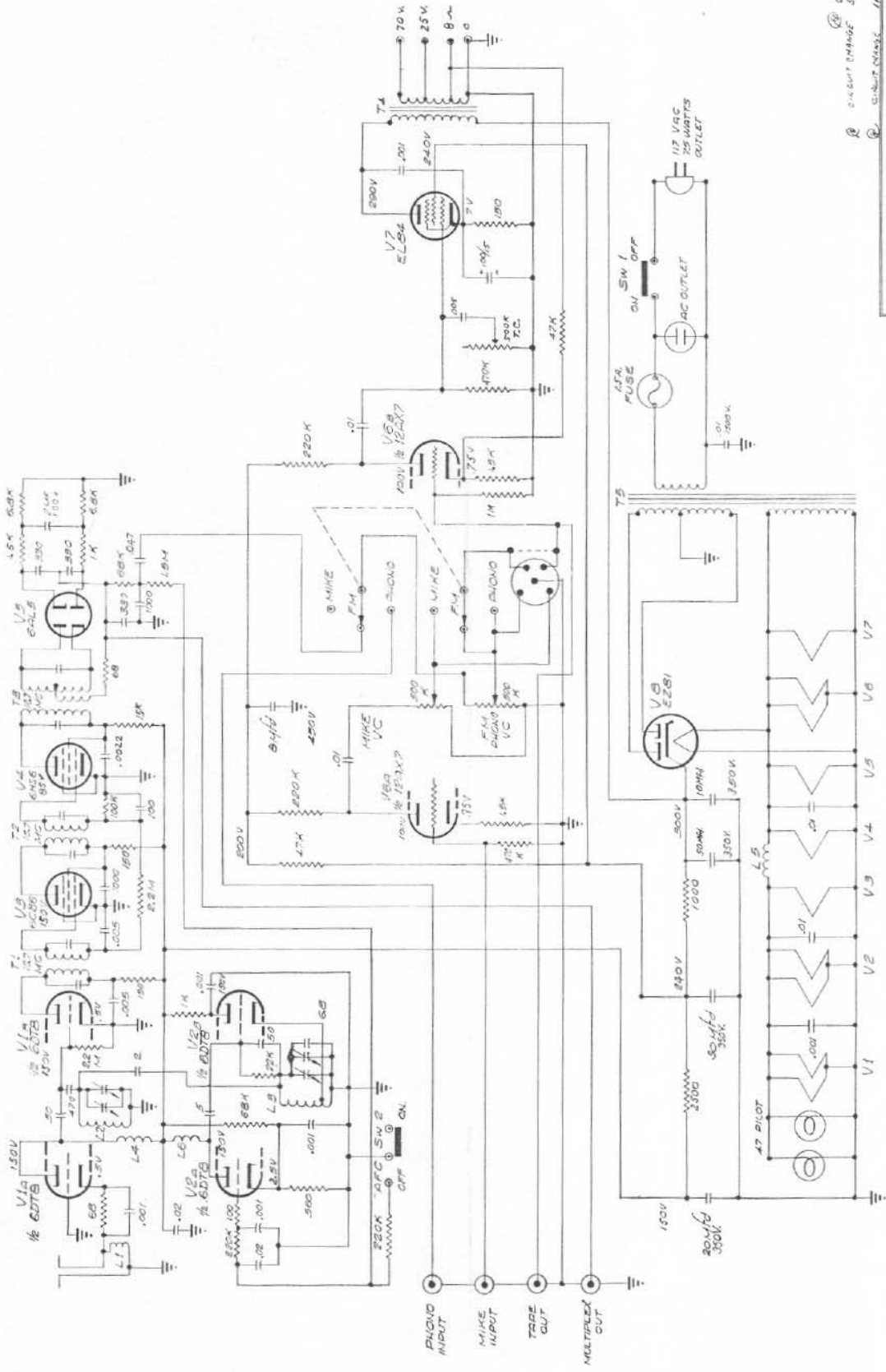
AFC refers to "Automatic Frequency Control" and is an electronic means of keeping the receiver properly tuned to the F.M. Broadcasting station. Even if the F.M. Tuner Pointer is not in the exact center of the channel, the AFC will automatically pull in the station to the proper point. However, in tuning 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.

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

## 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.



4 VOLTAGES TAKEN WITH VACUUM TUBE VOLTMETER.  
 5 ALL VOLTAGES TAKEN WITH NO SIGNAL INPUT.  
 6 RESISTORS: A - OHMS, K - KILOHMS, M - MEGOHMS.  
 7 ALL CAPACITORS IN MUF UNLESS OTHERWISE NOTED.

TRUTONE ELECTRONICS INC  
 VAN NUYS CALIF  
 MODEL 481A FM RECEIVER  
 117 VOLTS AC 60 CYCLES 75 WATTS  
 ENGINEER: MARK COHEN OCT 16, 1961  
 APPROVED: H.C. PNT DEPTS: W. Schmitt

6-21-61  
 5-20-65  
 11-2-61