

# MODELS 1005-1007-1011-1012 TUNER-AMPLIFIER-BACKGROUND MUSIC SYSTEMS

## INSTRUCTION MANUAL

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

#### GENERAL DESCRIPTION

Models 1005-1007-1011-1012 Background Music Tuner-Amplifiers consist of a High Fidelity ultra sensitive FM Tuner, complete with AFC and a 7 Watt audio amplifier. Models 1005 and 1007 incorporate an electronic squelch circuit for silencing commercials from those FM stations providing supersonic frequencies for this purpose. Models 1005 and 1011 include a shielded microphone input transformer and a 25 volt AC relay system, properly fused for remote microphone operation during paging, which silences the FM Tuner when the microphone is put in operation.

### 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 Teeco 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 1005, etc., Music System 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 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.

#### CONNECTIONS

The screw terminals for speaker connection are located in 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 4 to 8 ohm speaker. A number of speakers can be used by connecting them in parallel, or series parallel, to form an impedance of from 4 to 8 ohms.

The antenna connections are located on the right side of the chassis. For normal FM reception, a single wire of approximately 5' long will be satisfactory for most locations. This wire is to be connected to the right hand terminal. In remote or fringe areas, an external dipole antenna will increase the efficiency of the tuner.

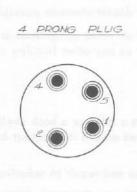
DO NOT TURN ON THE UNIT UNTIL THE SPEAKERS HAVE BEEN CONNECTED TO THE TERMINAL STRIPS AS POSSIBLE DAMAGE TO THE EQUIPMENT MAY OCCUR.

On models 1005 and 1011 adjacent to the 4-pin socket on the side of the chassis, there is located a removable fuse, to protect the 25 volt relay system. In the event it is necessary to replace the fuse, it shall be done with a  $\frac{1}{2}$  amp fuse, Buss  $\#C-\frac{1}{2}$ , or equivalent.

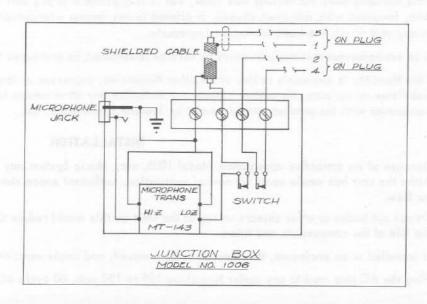
On all models: in the center of the back panels a phono jack has been provided so that an external amplifier can be connected. When an external amplifier is used to replace the amplifier portion on all models, the EL 84 tube must be removed. CAUTION--DO NOT CONNECT AN EXTERNAL AMPLIFIER UNTIL THE EL 84 TUBE HAS BEEN REMOVED.

For use as a paging system on models 1005 and 1011, a 4-prong socket has been provided on the right hand side of the chassis. The plug which is furnished with the unit is to be connected to a shielded cable and two unshielded leads or cable. One end of the center wire of the shielded cable is to be connected to pin #5 on the plug, and the shield itself is to be connected to pin #1. The other two ends of this cable are to be connected to a low impedance microphone. The two unshielded leads are to have two ends connected to pins #2 and #4 on the plug and the other ends of this wire are to terminate at a switch. The above connections are for a low impedance microphone.

Model 1006 Junction Box is available for use with a high impedance microphone. The "Push to Talk" return switch will operate the relay in a paging position only as long as the switch is held in that position and when released, will return the set to the FM reception. When the Junction Box is used, connect as indicated above, but terminate the leads as shown on the diagram.



NUMBER POSITION OF PINS
LOOKING- DOWN ON PINS



#### OPERATION OF MODELS 1005-1007-1011-1012

The front panel has three knobs and a slide switch. The functions of the knobs are as indicated. The Volume Control Knob, in addition to turning the set on and off, is also used to adjust the level of the sound of the FM portion only. 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.

On models 1005 and 1011 a separate volume control located next to the antenna terminals has been provided to adjust the volume of the paging system independently of the Tuner.

Below the "Tone" Control Knob on the front panel there is located a slide switch for the purpose of eliminating the electronic squelch function when the Tuner is used on stations that do not have a supersonic frequency. When the switch is thrown to the right the electronic squelch is in operation and will eliminate commercials on stations that provide a supersonic frequency for this purpose. When pushed to the left position this portion of the electronic circuit is non-operating and will avoid possible program interference. On models 1011 and 1012, the slide switch is not connected to any circuit and is inoperative.

On models 1005 and 1007, the electronic squelch circuit is adjusted at the factory for 22 KC, and will function satisfactorily on all stations using a squelch frequency between 21 and 23 KC. If the local station employs a frequency different from the above, the squelch can be adjusted as follows:

- On the bottom of the cabinet, a small hole has been provided to allow access to a slotted screw. To adjust the squelch circuit for a specific FM station, the slide switch on the front panel must be placed in the right hand position. The supersonic frequency of the station must be known or determined so that the procedure as indicated below, can be followed.
- 2. After this frequency has been determined, connect the output of an audio generator through a 50 MMF capacitor to point "X" as indicated on the schematic diagram, and adjust the audio generator to this frequency. Connect a Vacuum Tube Voltmeter to point "Y" as indicated on the schematic diagram, and set the VTVM to a 20 to 30 DC scale. Rotate the screw either to the left or right until maximum reading is obtained on the meter.
- 3. If the above instruments are not available, proceed as follows:
  With the slide switch still in the right hand position and the desired station tuned in, rotate the screw, while the commercials on the station are being broadcast, either to the right or left until the commercial fades out.

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THE INCLUSION OF THE ELECTRONIC SQUELCH CIRCUIT DOES NOT IMPLY PERMISSION TO USE EXCEPT WITH AUTHORIZATION FROM THE BROADCASTING STATION UTILIZING THE SUPERSONIC FREQUENCY.

