

MODEL 298 STANDARD RECEIVER MODEL MXR-299 STEREO MULTIPLEX RECEIVER INSTRUCTION MANUAL

BE SURE TO KEEP THIS INSTRUCTION BOOKLET AVAILABLE FOR READY REFERENCE

GENERAL DESCRIPTION

Model 298 Stereo Receiver is a complete high fidelity tuner-amplifier with an AM-FM Tuner and two separate 10watt power amplifiers. The FM portion is complete with AFC.

Model MXR-299 Stereo Multiplex Receiver is a complete high fidelity stereo system with an AM tuner, FM Multiplex tuner, and two separate 10-watt amplifiers. The FM portion is complete with AFC, and when used with the self-contained multiplex section provides authentic high fidelity stereo performance. The FM portion may also be used for monaural reception as desired.

The VOLUME control operates both channels simultaneously. The BALANCE control balances the output of both channels so that the volume of one speaker may be raised or lowered with respect to the other. Separate TREBLE and BASS controls operate both stereo channels simultaneously.

The unit has a Function Selector switch which selects AM, FM, or Ceramic Phono.

An FM Program selector switch is provided to select FM monaural or FM stereo multiplex programs.

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 their attractive appearance, Model 298 and MXR-299 Receivers may be placed on a table or a book shelf.

Altho the units have ample vents for normal ventilation, sufficient space should be allowed around them to permit free air flow.

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

The front panel has been designed for easy custom installation in a cabinet if desired.

If installed in a cabinet, 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.

Two AC receptacles are located on the rear of the chassis to supply power to other components such as phonograph motor, etc. The auxiliary equipment connected into the AC Receptacle is controlled by the On and Off switch so that turning off the amplifier, turns off all equipment.

The Antenna loopstick located at the rear of the chassis SHOULD NOT BE USED AS A HANDLE.

CONNECTIONS

All connections are made at the rear of the receiver.

ANTENNA: A 4 or 5 foot length of wire will generally suffice in areas of primary reception. The use of an outside antenna, however, is recommended for best results at all times.

SPEAKERS: Two speakers, each with an impedance of 8 ohms, are to be used for stereo operation. Any ordinary insulated wire, such as parallel lamp cord, is suitable for hooking up the speakers to the amplifier. Connect one lead from each speaker to the terminal marked "G" on the Terminal Strip and the other end of the speaker lead to the terminal marked "8". Connect one speaker to LEFT SPEAKER terminal and the other to RIGHT SPEAKER terminal.

DO NOT TURN ON THE RECEIVER UNTIL THE SPEAKERS FOR LEFT SPEAKER AND RIGHT SPEAKER HAVE BEEN CONNECTED TO THE TERMINAL STRIPS, AS POSSIBLE DAMAGE TO THE EQUIPMENT MAY

For connecting record players, tape recorders, or other auxiliary equipment, use shielded patch cord leads with a phono plug properly connected. Connect to jacks marked CER-PHONO L and R.

When a monaural phono cartridge, tape head, or recording playback unit is used instead of stereo, a "Y" jumper cord connector must be used so that the sound will come from both speakers. The bottom of the "Y" is connected to the phono cartridge and the other two junctions connect to left and right inputs.

OPERATION OF MODELS 298 AND MXR-299

On the front panel are located a tuning control, a function selector switch, an FM program selector switch, a volume control, a speaker balance control, a bass control, a treble control, a power off-on switch, and an AFC off-on switch.

For AM MONAURAL RECEPTION: Turn the Function Selector switch to the AM position. The AFC switch is inoperative when playing AM programs. The program will be reproduced by both the left and right speakers thereby providing greater presence of sound.

For FM MONAURAL RECEPTION: Turn the Function Selector switch to the FM position, and the FM Program selector switch to the Monaural position. The program will be reproduced by both the left and right speakers thereby providing a greater presence of sound.

It is suggested that the FM Program Selector switch always be set in the MONAURAL position when listening to FM monaural programs. This will avoid objectionable background noises which occur in certain areas if the switch is left on the multiplex position.

For FM STEREO MULTIPLEX RECEPTION (MODEL MXR-299 ONLY): Turn the Function Selector switch to the FM position, and the FM Radio Program selector switch to the MULTIPLEX position.

Stereo-Multiplex Reception may be improved in some locations with an outside antenna.

AFC refers to "Automatic Frequency Control", and is an electronic means of keeping the tuner properly tuned to the F.M. 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 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 AFC slide switch at the right 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.

VOLUME CONTROL: The "Volume" control adjusts the volume of both audio channels simultaneously.

BALANCE CONTROL: The "Balance" control balances the output of both channels so that the volume of one speaker may be raised or lowered with respect to the other.

TONE CONTROLS: The "Bass" and "Treble" controls are to be set in a vertical position for flat response. These controls can either boost or reduce the bass and treble of the stereo system. The bass and treble controls should be adjusted to suit the listener to compensate for room and speaker characteristics.

ADJUSTMENTS

When Model MXR-299 is installed, it is seldom necessary to make any service adjustments as all controls have been pre-set at the factory. However, if it should be necessary to adjust for correct channel separation, proceed as follows. Turn the Balance control on the front panel to the center position. Turn the control with the slotted shaft located on the chassis to the extreme left (counter-clockwise) position. Tune in an FM stereo multiplex program; rotate the control with the slotted shaft toward the right until the best stereophonic blend is obtained.

In isolated cases a "motorboating" or "putt-putt" sound may be heard when listening to a stereo multiplex program. This indicates that the oscillator coil is slightly out of synchronization. To correct this condition it is necessary to adjust the unit as follows. Turn the Balance control on the front panel to the center position. Turn the control with the slotted shaft on the chassis, to the extreme left (counter-clockwise) position. Adjust the oscillator coil on the extreme left at the rear of the receiver (adjacent to the ANT-GND terminal) with a non-metallic screwdriver. Turn slightly to right or left for maximum and clearest sound. Reset the control with the slotted shaft on the rear of the panel, to the point of best stereo blend.

If when using an inside antenna a "motorboating" or "putt-putt" sound is heard on one or more stereo programs whereas on others the programs are clear, it will be necessary to use an outside antenna so that all stations broadcasting stereo multiplex are heard clearly.

