

MIN-X SINGLE CHANNEL R/C TRANSMITTER

For use as Class "C" radio station in citizen's radio service

INTRODUCTION

Your Min-X transmitter is a high quality, carefully built unit. It has extremely high output for a hand held transmitter. By simply throwing a switch on the front of the transmitter, you can change from a 100% modulated tone carrier on signal, to a powerful C. W. signal. Thus one transmitter will fly just about any plane.

This transmitter is a crystal controlled single channel C.W. or 100% tone modulated type. It is designed to operate on any of the Class "C" frequencies between 26.995 and 27.255 megacycles. As the transmitter comes to you, it contains a crystal which allows it to operate on 26.995 megacycles.

The R.F. section of this transmitter is of the master oscillator, power amplifier type (M.O.P.A.) and has a very high signal output (see diagram for tube specifications, etc.)

BATTERY REQUIREMENTS

- "A" BATTERY - 1 Req. - BURGESS 4F or equal (1½ volts)
 - "B" BATTERY - 2 Req. - BURGESS XX45 or equal (67½ volts)
- (See diagram for battery installation)

OPERATING INSTRUCTIONS

1. Install antenna on top of transmitter.
2. When the switch is turned on in tone position, the transmitter emits a continuous carrier; depressing the key switch gives a 100% modulated signal.
3. When the switch is turned on in C.W. position and the key depressed, the transmitter will emit a carrier wave only.
4. The transmitter is tuned at the factory and should not require retuning unless the crystal is changed. If retuning is required, the following procedure should be followed by a Licensed Commercial Operator only:

Before tuning it is necessary to remove the back of the transmitter. No holes have been allowed for this as once it has been set up, re-tuning is seldom necessary. When the back is replaced, it will not affect your adjustments.

There are two tuning adjustments. The oscillator is tuned by the slug tuned coil mounted on its side on the printed circuit board (red dot). The power amplifier is tuned by the ceramic trimmer capacitor (yellow dot).

NOTE: When adjusting this with a metal screw driver, do not touch the case with it as this will short out the "B" battery. (See diagram for location of tuning adjustments).

5. The proper setting for the oscillator coil (red dot) is found by observing transmitter output, (brightness of tuning bulb or a field strength meter) and turning the slug in the coil in (clockwise) until maximum output is noted. If it is turned in too far, output will drop off. Turn out until maximum output is observed again. Next, turn the trimmer capacitor (yellow dot) until you have maximum output.

NOTE: If these adjustments are far off, a field strength meter will be required to find the proper tuning positions. If the output begins to drop off, check the batteries. If the "B" battery voltage is less than 100 volts, with the transmitter on, they should be replaced.

6. It is always good to repeat step five several times to get maximum sensitivity as one adjustment can unbalance the other.
7. No warm up time is necessary for flying or tuning.

Warning: Make sure sheet metal screws used to hold case together do not cut into batteries. If in doubt, grind off sharp ends.

(OVER)

TROUBLE SHOOTING

- Problem: Tuning light dims when transmitter is picked up in your hand.
- Answer: This is normal and does not affect the output.
- Problem: Tuning light dims when it is keyed with selector switch in tone position.
- Answer: This is normal and must happen if transmitter is working properly.
- Problem: Tuning bulb is out when in C. W. position.
- Answer: The tuning bulb will be out in C. W. position until you key the transmitter. The bulb lights up only when the transmitter is putting out a signal. In tone position your transmitter (when turned on) is putting out a continuous carrier wave. When it is keyed (tone position) a tone is put out in addition to the carrier, thus operating your receiver.
- Problem: Tuning bulb does not light with switches in any position.
- Answer: First check all batteries to see if they are up to voltage. If they are, follow tuning instructions. The transmitter comes from the factory tuned to 26.995 and at the most, might be slightly off tuned due to rough handling in shipping, etc. If anything other than the above or something you don't understand occurs, don't complain or take chances. Please send it back for service. (See our warranty).

WARRANTY

The Min-X is warranted by the manufacturer to be free from defects of workmanship and materials for a period of thirty days. However, any damage which is judged by the manufacturer to be due to abuse by the user will be repaired for cost of parts, plus a nominal service charge.

If at any time past the warranty date, your transmitter gives you trouble, don't hesitate to return it for service. Many simple adjustments will be made without charge. The Min-X service policy is unequalled in the R. C. field. Many repairs are returned the same day or within a few days after their receipt. When sending your receiver in for a free service check up after warranty date, please include return postage and insurance or we will return it, postage C.O.D. Send it directly to us and save time. Your dealer is busy and can't always stop to send your equipment in for repairs immediately.

NOTICE: It is illegal to operate this transmitter without a proper license. Form #505 dated September, 1958, can be obtained from your dealer or the nearest Federal Communications Commission office.

Min-X Radio, Inc., certifies that this transmitter is designed, manufactured and furnished, in accordance with the specifications contained in paragraph 19.71D of the Citizens' Radio Service Data.

