MIN-X ALL TRANSISTOR RECEIVER

INTRODUCTION

Your Min-X single channel receiver is the finest that money can buy and is backed up by the best and fastest service policy in the R. C. field. It is factory tuned and adjusted for 27.255 m.c. No further tuning is required or recommended unless you change to any one of the other new FCC frequencies between 26.96 and 27.255. A carefule range check should be all that is necessary before flying.

Some of the advantages of the receiver are as follows:

1. Three volt battery operation (no "B" batteries), very low current consumption.
2. Very high relay current change.
3. Instantaneous response (ideally suited for pulse proportional) and quick blip motor control.
4. Weight only 2½ oz. with case and plug.
5. Truly temperature compensated.

MOUNTING

It is recommended that you shock mount on at least 1/2" foam rubber. See wiring diagram for details. It is very important that the receiver be mounted as in the diagram to get maximum crash resistance.

WIRING

1. Be neat with all wiring. Solder very carefully with rosin core solder. DO NOT USE ACID CORE SOLDER.
2. To avoid breakage due to vibration, use wire that is as flexible as possible.
3. Always range check your plane at about 900 to 1,000 feet before the beginning of each days flying.
4. Min-X is made to operate with a Min-X transmitter. However, satisfactory operation may be had with any good transmitter that is 80% to 100% modulated with a tone frequency of between 400 & 1,000 cycles per second. The transmitter must emit a continuous carrier wave when turned on. When the transmitter is keyed, the tone signal will actuate the relay.
5. When operating in temperatures below 30°, we recommend using 4½ volts on receiver, but never more.

ANTENNA

Excellent reception will be had with a 22" antenna, either vertical or to the rudder. The longer the antenna, the better the reception of signal. Up to nine feet of antenna has been added in tests without changing the tuning.

TUNING PROCEDURE

1. Receiver is factory tuned to 27.255 megacycles and should not need further tuning unless removed from its case or used without its cover.
2. Please refer to wiring diagram to determine hook-up of earphone used in tuning.
3. Tuning, if necessary, should be done at a distance of several hundred feet to get the best results. Tuning is observed by listening with a high impedance earphone connected as in fig. 1. Tune the receiver coil with the transmitter turned on and in tone position. Depress the transmitter key and tune the receiver until the loudest signal is heard. The Hex tuning wand can be purchased through your dealer or any wholesale radio supply. This is a standard TV tuning wand.
4. When tuning, avoid touching or getting close to the antenna as this can affect the results. Tune with case cover on if it is to be used.

(Over)

TROUBLE SHOOTING

Below are listed the three most common causes of trouble.

Problem: Relay chatters when motor is running (receiver and transmitter turned on).

Possible Cause: Loose batteries or vibration troubles with wiring. On three volt radio equipment, any loose connections will show up more than on high voltage equipment. Remember, bad battery connections are the biggest cause of radio failure on three volt equipment. If the batteries rotate with motor vibration, they are not tight enough.

Problem: Relay chatters or pulls in (receiver turned on; transmitter off).

Possible Cause: If not loose batteries or other electrical connections, this may happen to a few receivers in hot weather. When transmitter is on, the carrier will quiet the relay. This should not be a cause for alarm as long as the receiver operates normally with the transmitter turned on.

Problem: Poor range.

Possible Cause: If you are sure your transmitter is operating properly and your receiver batteries are good, check the tuning by following the tuning instructions. This seldom necessary unless the tuning slug becomes loose. Receiver batteries should be replaced when they read $1\frac{1}{4}$ volts each or when range decreases.

If anything gives you trouble other than the above, or the solutions do not solve the problem, send the receiver back as per the warranty instructions. Remember, loose batteries, bad switches or plug jacks are the biggest cause of trouble in all R. C. equipment. Complaining about any dead radio equipment of any manufacturer will not get it flying. SEND IT BACK FOR SERVICE.

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 receiver 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 unequaled 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.

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