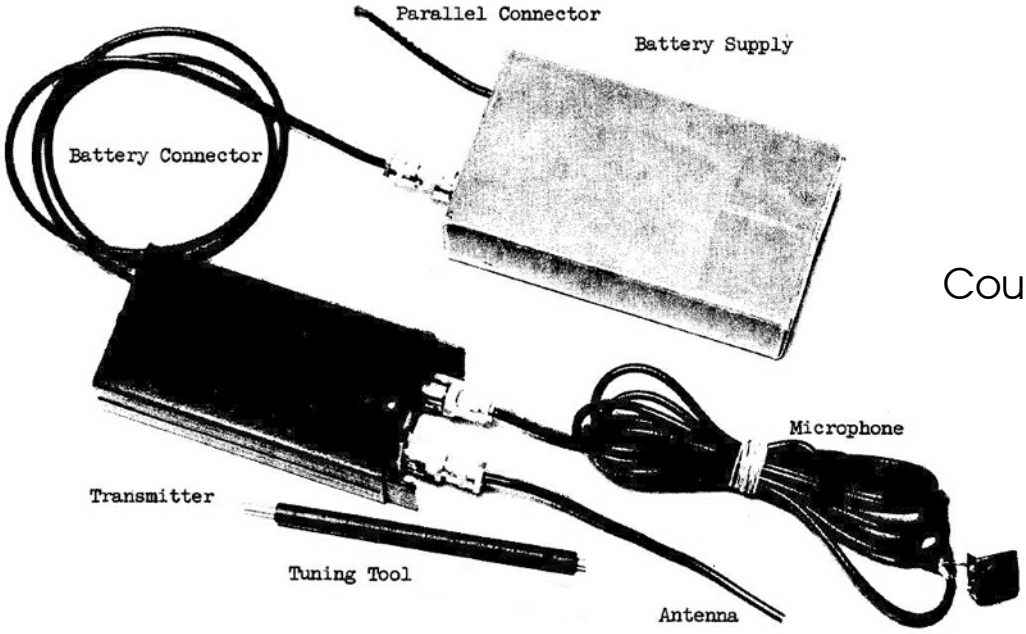


RT-3R

Country of origin:
USA

DATA SUMMARY

Organisation: CIA.

Design/Manufacturer: Unknown.

Year of Introduction: About 1958.

Purpose: Wireless bug transmitter.

Transmitter:

Circuit details: Free running oscillator, RF output amplifier, two modulator stages. FM deviation up to 15kHz, variable to suit the type of microphone and associated receiver. The issued microphone was a Shure MC-30.

RF output: 7mW or greater at 50 Ohm.

Aerial: Quarter wave wire.

Frequency Coverage: 3 versions are noted: 55-63MHz (green), 64-72MHz (blue), 73-81MHz (white).

Associated Receivers: ASR-1, PFR-5 and others.

Power Supply: 6.5V DC battery pack consuming 10mA, or Power Supply RT-3PS operating on 105/210V AC mains.

Size (cm): Height 1.9, length 9.7, width 4.5, weight 170 g.

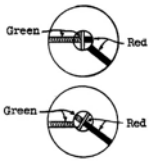
Remarks

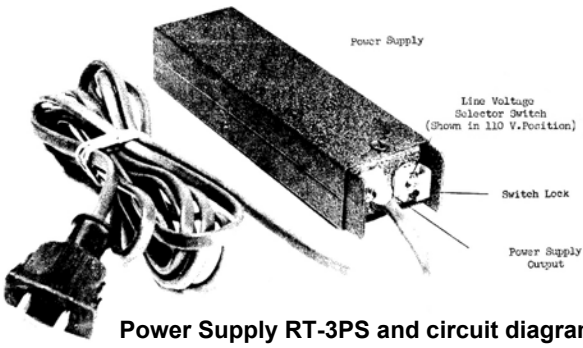
Transmitter RT-3R was a miniature transistorised wireless bug and an improved version of the RT-3.

The transmitter operated on a field adjustable pre-set frequency in the range of 55-81MHz, divided into three factory tuned bands, each with a coloured dot marking on the case to identify the band.

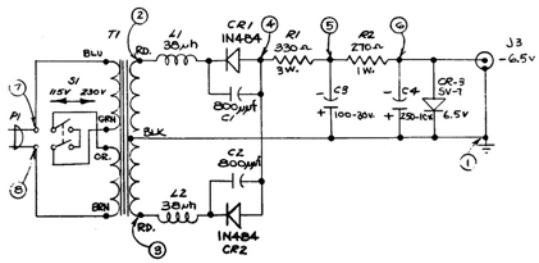
It was powered from a separate battery pack consisting of five Mallory RM-12R cells connected in series and assembled in a cardboard case, giving about 360 hours of operation. A parallel connector allowed two or more packs to be connected in parallel if longer operation was required. The transmitter could also be powered from AC mains using Power Supply RT-3PS.

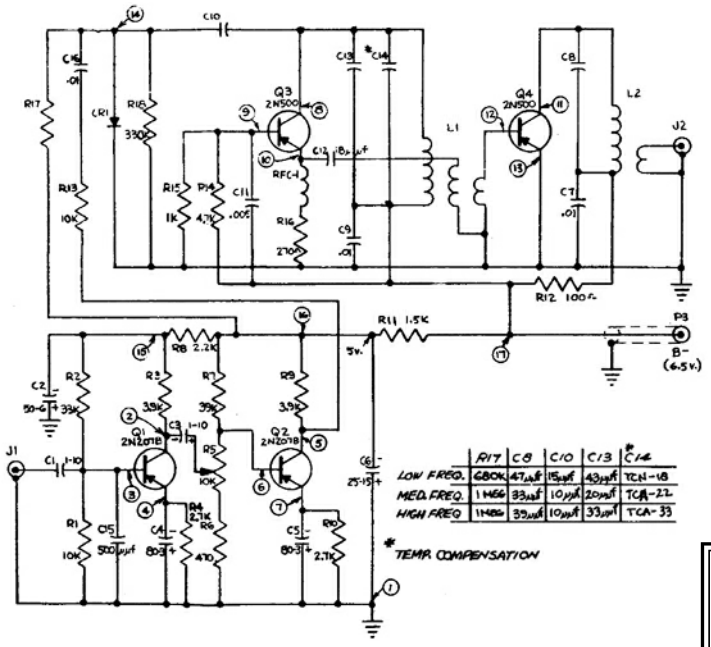
Nominal deviation setting was matched to the receiver in use and could be set from 2 to 15kHz. The 5 and 10 kHz points in the deviation setting were marked by green and red dots as shown in the drawings right.





Power Supply RT-3PS and circuit diagram.





	R17	C8	C10	C13	*C14
LOW FREQ.	680K	47μμf	15μμf	43μμf	TCH-18
MED. FREQ.	1 MEG	33μμf	10μμf	20μμf	TCA-22
HIGH FREQ	1 MEG	33μμf	10μμf	33μμf	TCA-33

Circuit diagram RT-3R.

References:

- Operating and maintenance manual for transmitter RT-3R and Power Supply RT-3PS. Via Pete McCollum, N0TDM, USA.