

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S MANUAL
RADIO RECEIVER R-390/URR

Headquarters, Department of the Army, Washington 25, D. C.
 29 December 1960

WARNING**DANGEROUS VOLTAGES EXIST IN THIS EQUIPMENT**

Be careful when working on the 240-volt power supply and the circuits connected to it, or on the 115/230-volt ac line connections. Before connecting the receiver to an ac source, be sure that the chassis is connected to the same ground as the ac source.

DON'T TAKE CHANCES!

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*This manual supersedes TM 11-5820-357-10P, 4 November 1959, and such portions of TM 11-856, 11 January 1955, including C1, 23 June 1955, C2, 29 September 1955, C3, 19 January 13 C4, 22 December 1958, and C5, 31 December 1959, as pertains to operation of equipment.

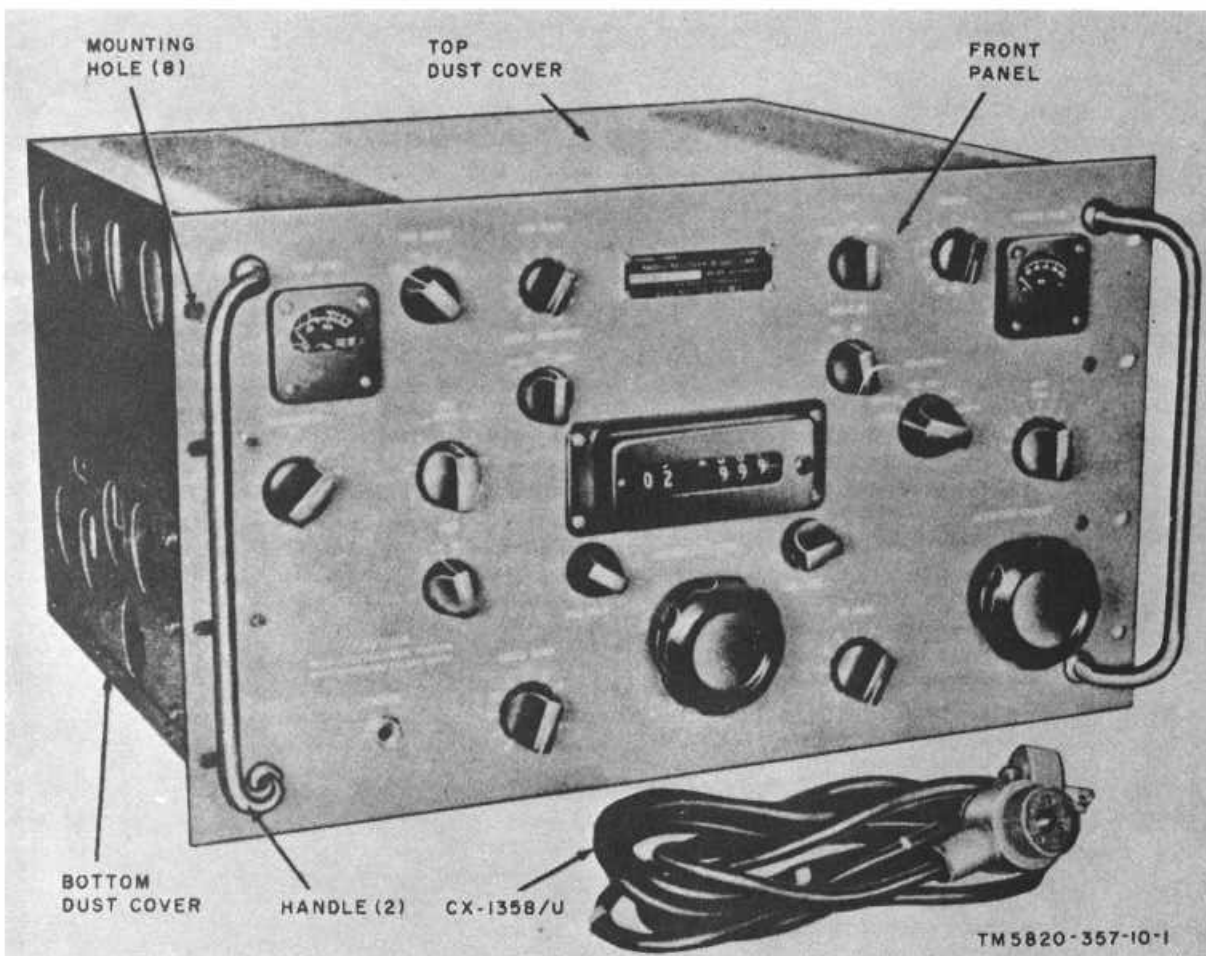


Figure 1. Radio Receiver R-390/ URR.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

This manual describes Radio Receiver R390/URR (fig. 1) and covers its operation and operator's maintenance. It includes operation under usual conditions, methods of cleaning and inspecting the equipment, and replacement of parts available to first echelon maintenance. Throughout this manual, Radio Receiver R390/URR will be referred to as the receiver.

2. Forms and Records

a. Unsatisfactory Equipment Reports.

- (1) Fill out and forward DA Form 468 (Unsatisfactory Equipment Report) to the Commanding Officer, U. S. Army Signal Materiel Support Agency, ATTN: SIGMS-ML, Fort Monmouth, N. J., as prescribed in AR 700-38.
- (2) Fill out and forward AF TO Form 29 (Unsatisfactory Report) to the Commander, Air Materiel Command, Wright-Patterson Air Force Base, Ohio, as prescribed in AR TO 0035D-54.

b. *Report of Damaged or Improper Shipment.* Fill out and forward DD Form 6 (Report of Damaged or Improper Shipment) as prescribed in AR 700-58 (Army); Navy Shipping Guide, Article 1850-4 (Navy); and AFR 71-4 (Air Force).

c. *Preventive Maintenance Forms.* Prepare DA Form 11-238 (fig. 12), Maintenance Checklist for Signal Equipment (Sound Equipment, Radio, Direction Finding, Radar, Carrier, Radiosonde and Television), in accordance with instructions on the form.

d. *Parts List Form.* Forward DA Form 2028, Recommended Changes to DA Technical Manual Parts Lists or Supply Manual 7, 8, or 9, directly to the Commanding Officer, U. S. Army Signal Materiel Support Agency, ATTN: SIGMS-ML, Fort Monmouth, N. J., with comments on parts listing.

e. *Comments on Manual.* Forward all other comments on this publication directly to the Commanding Officer, U. S. Army Signal Materiel Support Agency, ATTN: PA2d, Fort Monmouth, N. J.

Section II. DESCRIPTION AND DATA

3. Purpose and Use

a. Radio Receiver R390/URR is a general purpose receiver for use in fixed and mobile applications. The receiver provides for recep-

tion of continuous wave (cw), modulated-continuous-wave (mcw) amplitude-modulated (am.), frequency shift keyed (fsk), and single-sideband signals.

b. The receiver furnishes audiofrequency (af) output power to a local loudspeaker and headset or a balanced line. An intermediate frequency (if.) output is also provided so that received radio teletypewriter signals may be fed to other equipment for conversion into signals usable by teletypewriter equipment.

4. System Application

a. Space-Diversity Receiving System.

- (1) Two or three receivers can be connected as a space-diversity receiving system for reception of voice signals (fig. 2). This system provides sub-

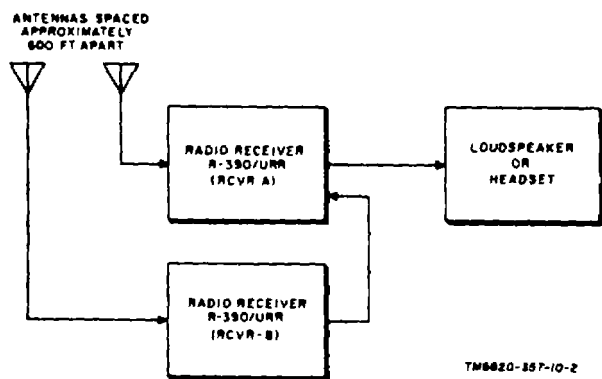


Figure 2. Space diversity receiving system.