

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

DEPARTMENT OF THE AIR FORCE TECHNICAL ORDER

TM 11-5820-200-10
TO 31S3-3 MC364-21

OPERATOR'S MANUAL

REPRODUCING
EQUIPMENT MC-364-D
AND PUBLIC ADDRESS
SET AN/UIH-2

This reprint includes all changes in effect at the time of
publication; changes 6, 8, and 9..

DEPARTMENTS OF THE ARMY AND AIR FORCE
AUGUST 1958

TECHNICAL MANUAL }
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WASHINGTON 25, D. C., 11 August 1958

REPRODUCING EQUIPMENT MC-364-D AND PUBLIC ADDRESS SET AN/UIH-3

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* This manual supersedes so much of TM 11-436, 9 September 1947, and C 2, 9 March 1954, as pertains to operating instructions.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

a. This manual describes Reproducing Equipment MC-364-D and Public Address Set AN/UIH-2 and covers operation and operator's maintenance. It includes operation under usual and unusual conditions, cleaning and inspection of the equipment, and replacement of parts available to first echelon maintenance.

b. Official nomenclature followed by (*) is used to indicate all models of the equipment covered in this manual. Thus, Sound Reproducer RP-104 (*)/UIH-2 represents Sound Reproducers RP-104/UIH-2 and RP-104A/UIH-2.

c. The following supply manuals contain maintenance parts information pertaining to this manual :

SIG 7 & 8 AN/UIH-2 Public Address Set AN/UIH-2.

SIG 7 & 8 LS-148/U. Loudspeaker Assembly LS-148/U.

SIG 7 & 8 MC-364... Reproducing Equipment MC-364-A, B, C, D.

SIG 7 & 8 MX-932/U Turntable MX-932/U.

d. The terms listed below are used herein.

Disk A complete phonograph record, or the blank used in a sound recorder.

Record A commercial phonograph pressing. The term is also applied to instantaneous recording disks.

Transcription An electrical recording, such as a high-fidelity 331/3 rpm record (usually 16 inches), containing part or all of a radio program for use in broadcast studios.

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 Equipment Support Agency, Fort Monmouth, N. J., as prescribed in AR 700-38.

(2) Fill out and forward AFTO Form 29 (Unsatisfactory Report) to the Commander, Air Materiel Command, Wright-Patterson Air Force Base, Ohio, as prescribed in AFTO 00-35D-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) and AFR 71-4 (Air Force).

c. *Preventive Maintenance Forms.* Prepare DA Form 11-238 (figs. 8 and 9) (Maintenance Check List 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 Manuals 7, 8, and 9) direct to the Commanding Officer, U. S. Army Signal Equipment Support Agency, Fort Monmouth, N. J., for comments on parts listings.

e. *Comments on Manual.* Forward all other comments on this publication direct to the Commanding Officer, U. S. Army Signal Publications Agency, Fort Monmouth, N. J.

Section II. DESCRIPTION AND DATA

3. Purpose and Use

a. Purpose. The MC-364-D (fig. 1) and the AN/UIH-2 are portable sound reproducers that provide facilities for sound amplification either for entertainment purposes or, in conjunction with a film strip projector, for training purposes.

b. Use. Either equipment can be used as a sound reproducer, with a record as a source of sound ; as a public address system, with a microphone as a source of sound; or as a mixer, with both a record and a microphone as sources of sound.

4. Technical Characteristics

a. Major Components (fig. 1).

Turntable MX-932/U :

Power requirements.	115 or 230 volts, 50 to 60 cps, single phase.
Power output _ _ _	10 watts.
Maximum gain :	
Microphone channel.	130 db.
Sound reproducer channel.	Approximately 130 db.
Frequency response :	
Microphone channel.	70 to 9,000 cps, ± 2 db variation.
Sound reproducer channel.	70 to 4,000 cps, ± 2 db variation.
Impedance :	
Input, microphone channel.	50 ohms.
Input, sound reproducer channel.	Approximately 3 megohms.
output _ _ _ _ _	3.4 ohms.
Turtable motor:	
Type _ _ _ _ _	Single-phase, shaded-pole, ac, induction.
Speed (looking at load end).	33 1/3 and 78 rpm.
Sound reproducer cartridge.	Crystal-type, high temperature, cutoff frequency 4,000 cps, with standard groove reproducing stylus.

Number of electron tubes. 5.

Reproducing medium :

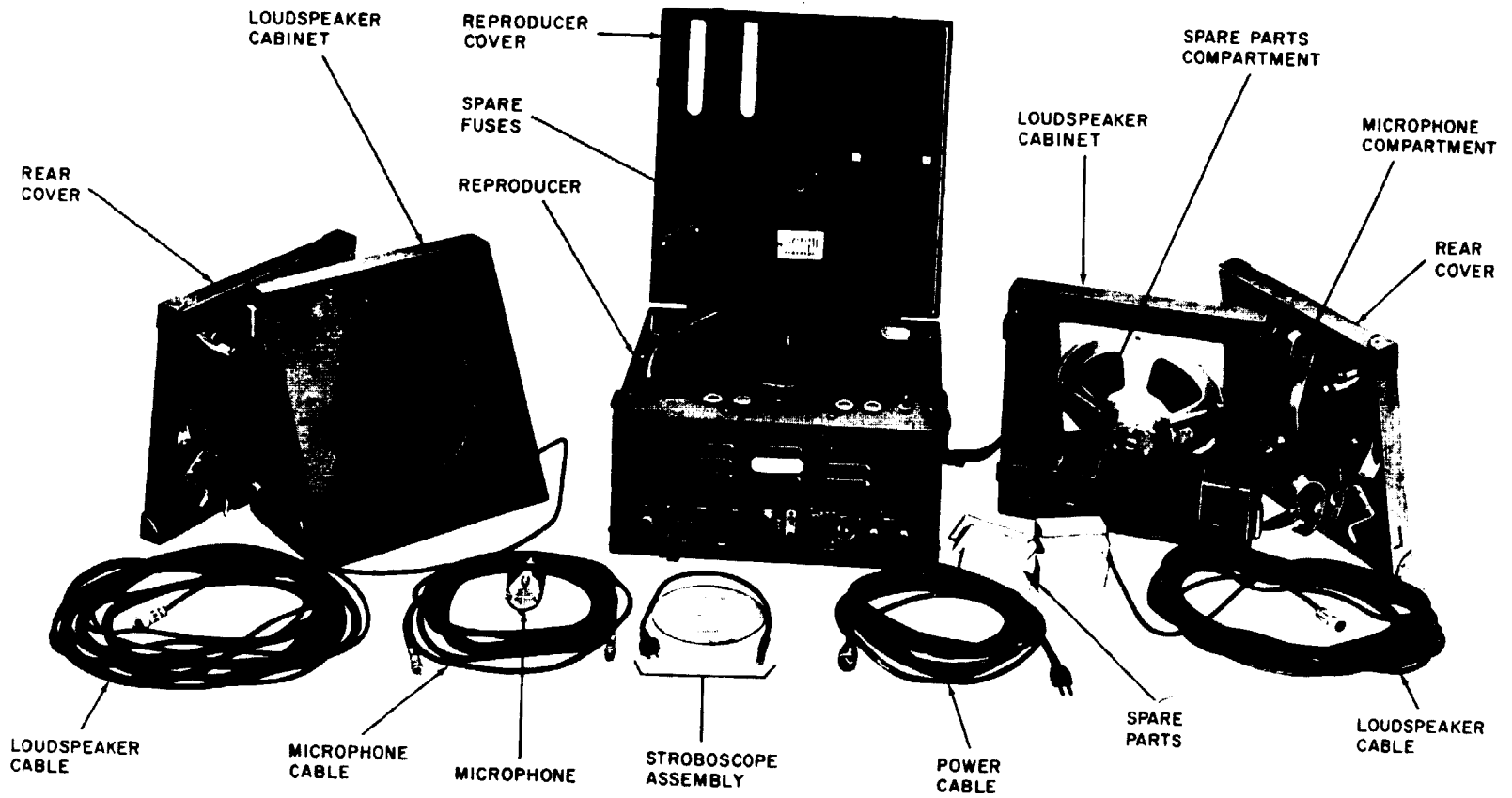
Type Disk (record).
Disk size _ _ _ _ 10, 12, or 16 inches in diameter.

Reproducing time :

10-inch disk :
 3 1/3 rpm 6 1/2 minutes each side.
 78 rpm.. 3 minutes each side.
12-inch disk :
 33 1/3 rpm. 8 1/2 minutes each side.
 78 rpm- 4 minutes each side.
16 -inch disk :
 33 1/3 rpm 13 minutes each side.
 78 rpm_ 6 minutes each side.

Sound Reproducer RP-104(*)/UIH-2:

Power requirements.	115 or 230 volts, 50 to 60 cps, single phase.
Power output -	10 watts.
Maximum gain:	
Microphone channel.	130 db.
Sound reproducer channel.	Approximately 130 db.
Frequency response :	
Microphone channel.	70 to 9,000 cps, ± 2 db variation.
Sound reproducer channel.	70 to 3,000 cps, ± 2 db variation.
Impedance :	
Input, microphone channel.	50 ohms.
Input, sound reproducer channel.	Approximately 3 megohms.
output	3 ohms.
Turtable motor:	
Type _ _ _ _ _	Single-phase, shaded-pole, ac, induction.
Speed (looking at load end).	33 1/3, 45, and 78 rpm.



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Figure 1. Public address set, component parts.

Sound reproducer cartridge - Ceramic-type, cutoff frequency, 3,000 cps, turn-over - type cartridge, removable microgroove reproducing stylus on one side, standard groove reproducing stylus on other side.

Number of electron tubes - 5.

Reproducing medium :

Type ----- Disk (record).

Disk size --- 7, 10, 12, or 16 inches in diameter.

Reproducing time :

Standard groove:

10-inch disk :
33 1/3 6 1/2 minutes each side.

78 rpm 3 minutes each side.

12-inch disk :
33 1/3 8 1/2 minutes each side.

78 rpm 4 minutes each side.

16-inch disk :
33 1/3 13 minutes each side.

78 rpm 6 minutes each side.

Microgroove:

7-inch disk, 45 rpm 7 minutes each side.

10-inch disk, 33 1/3 rpm 13 minutes each side.

12-inch disk, 33 1/2 rpm 17 1/2 minutes each side.

Microgroove extended play, 45 rpm 10 1/2 minutes each side.

b. *Minor Components* (figs. 2 and 3).

Dynamic Microphone M-23/U :

Type ----- Dynamic, unidirectional.
Frequency response. 60 to 7,500 cps.
Output impedance. 30 to 50 ohms.

Dynamic Microphone M-43/U :

Type ----- Dynamic, omnidirectional.
Frequency response. 160 to 4,500 cps.
Output impedance. 150 ohms.

Loudspeaker Assembly LS-148/U :

Number of loudspeakers - 2.

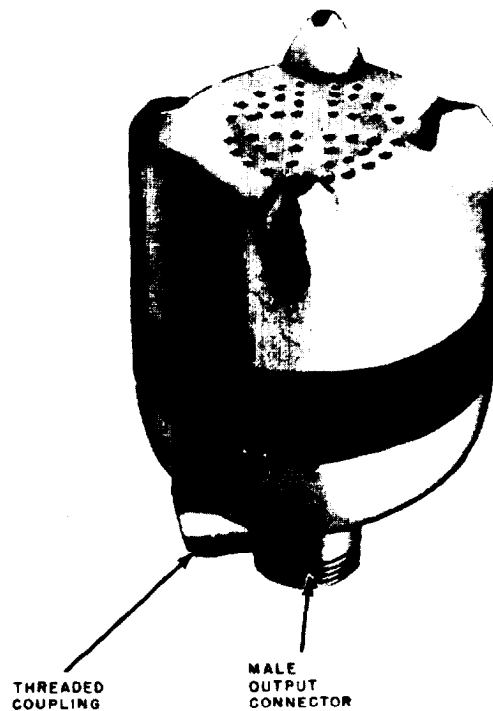
Type ----- Dynamic, permanent magnet.

Frequency response. 80 to 6,000 cps.

Output power (peak). 6 watts.

Input impedance. 3.2 ohms.

Interconnecting cables 4.



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Figure 2. Dynamic Microphone M-23/U.