

# TM 11-6625-564-45

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

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GS AND DEPOT MAINTENANCE MANUAL  
**MAINTENANCE KIT, ELECTRONIC  
EQUIPMENT MK=731/ARC=51X**

This **copy** is a reprint which includes current pages from Changes 1 and 2.

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*HEADQUARTERS, DEPARTMENT OF THE ARMY  
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**MAINTENANCE KIT, ELECTRONIC EQUIPMENT  
MK-731/ARC-51X**

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\*This manual supersedes TM 11-6625464-45, 7 January 1965.

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# CHAPTER 1

## FUNCTIONING OF MAINTENANCE KIT, ELECTRONIC EQUIPMENT MK-731/ARC-51X AND MK-731A/ARC-51X

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### Section I. GENERAL

#### 1-1. Scope

Note: Maintenance Kit, Electronic Equipment MK-731A/ARC-51X is similar to Maintenance Kit, Electronic Equipment MK-731/ARC-51X. Information in this manual applies to both kits unless otherwise specified.

a. This manual covers general support and depot maintenance for Maintenance Kit, Electronic Equipment MK-731/ARC-51X and MK-731A/ARC-51X (referred to as the maintenance kit). It includes instructions applicable to general support and depot maintenance for troubleshooting, testing, aligning, repairing the equipment, and replacing maintenance parts. It also lists tools, materials, and test equipment for general support and depot maintenance.

b. The purpose, operation, and interoperation of the various circuits (electrical, electronic, and electromechanical) in the maintenance kit are explained in paragraphs 1-4 through 1-30. Familiarity with the equipment, how it works, and why it works the way it does are valuable tools in troubleshooting the equipment rapidly and effectively.

c. The complete technical manual for this equipment includes TM 11-6625-564-12.

Note: For applicable forms and records, see paragraph 1-3 in TM 11-6625-564-12.

#### 1-2. Index of Publications

Refer to the latest issue of DA Pamphlet 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment. Department of the Army Pamphlet No. 310-4 is an index of current technical manuals, technical bulletins, supply manuals (types 7, 8, and 9), supply bulletins, lubrication orders, and modifica-

tion work orders available through publications supply channels. The index lists the individual parts (-10, -20, -35P, etc) and the latest changes to and revisions of each equipment publication.

#### 1-3. Reporting of Equipment Manual Improvements

The direct reporting of errors, omissions, and recommendations for improving this equipment manual, by the individual user, is authorized and encouraged. DA form 2028 will be used for reporting these improvements. This form may be completed by the use of pencil, pen, or typewriter. DA form 2028 will be completed by the individual using the manual and forwarded direct to Commanding General, U.S. Army Electronics Command, ATTN: AMSEL MA-AC Fort Monmouth, New Jersey 07703.

#### 1-4. Signal Paths of Simulator, Set, Radio

(fig. 4-8 and 4-8.1)

a. When Simulator, Set, Radio SM-348/ARC-51X and SM-348A/ARC-51X (referred to as radio set simulator) is used in the aircraft in place of the receiver-transmitter, it generates test signals through interconnecting cabling to the associated aircraft equipment. The radio set simulator has various indicators and a meter which show whether the test signals returned from the other units through the aircraft wiring are correct. A TEST SELECT switch, located on the front panel of the radio set simulator (TM 11-6625-564-12), is used to connect the meter into various circuits for monitoring