TM 11-5895-1141-34

DIRECT SUPPORT AND GENERAL SUPPORT

MAINTENANCE MANUAL

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CONTROL, RADIO CHANNEL

C-1 0931 (P)/FRC

(NSN 5820-01-114-1456)

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DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL
CONTROL, RADIO CHANNEL C-10931(P)/FRC
(NSN 5820-01-114-1456)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms) or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703-5007. A reply will be furnished to you.

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HOW TO USE THIS MANUAL

This manual describes test and maintenance of the C-10931(P)/FRC at the direct support and general support maintenance levels. In addition to the introductory chapter, it contains equipment description, test, fault isolation information, maintenance and troubleshooting procedures for its major assemblies.

FRONT COVER INDEX - tells you at a glance on what pages you can find the procedures and information that you will use most often. These items are also enclosed in a box when they appear on the full table of contents.

IMPORTANT INFORMATION IN THE TEXT IS IN BOLD LETTERS. If you are an experienced technician thoroughly familiar with the detailed procedures, this will help you scan the text and find the information you need without reading the entire procedure.

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

SECTION CONTENTS PAGE

Scope 1-1
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1-1. SCOPE

This manual provides the theory of operation, instructions for installation, and direct support and general support maintenance procedures for Control, Radio Channel C-10931(P)/FRC equipment.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750 as contained in Maintenance Management Update.

1-3. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your C-10931(P)/FRC needs improvement , let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703-5007. We'll send you a reply.

Section II. EQUIPMENT DESCRIPTION AND DATA

SECTION CONTENTS PAGE

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Physical Description and Module Location	1-2
Description of Major Components	1-2
Electrical and Signal Characteristics	1-4
Operation	1-4
Difference Between Modules	1-4

1-4. PURPOSE AND USE

The purpose of the C-10931(P)/FRC equipment is to provide a capability of controlling 1 to 8 radio channels used in air traffic control by means of a complete radio control operator's position. Each radio channel contains a transmitter and receiver remotely operated through the Radio Channel Control System.

1-5. PHYSICAL DESCRIPTION AND MODULE LOCATION

The C-10931(P)/FRC equipment is a self-contained unit designed to be mounted on a flat, horizontal surface wherever operation is convenient and necessary wiring is accessible. The console is 16-1/4 wide by 14-1/2 deep by 7-1/2 inches high at the front, and 5 inches high at the rear. Four rubber feet, 5/8 inches high are attached to the bottom of the console and a microphone hanger bracket is attached on the right side. All necessary wiring passes through a cutout in the rear of the chassis. A front view of the console is shown in figure 1-1. The numbered callouts locate the various modules mounted on the front panel. The list below identifies the modules numbered in figure 1-1.

a. Microphone amplifier/lamp brightener module assembly
b. Recorder-monitor module PL-1455/FRC
c. Volume control module assembly
d. Audio unit assembly
e. Selector Module, Radio Channel SA-2328/FRC
f. Blank panel assembly
g. Selector unit assembly
h. Headset/microphone jack panel assembly
I. Table top console assembly

1-6. DESCRIPTION OF MAJOR COMPONENTS

What follows is a brief functional description of the major assemblies within the system.

a. Microphone Amplifier/Lamp Brightness Assembly. This assembly is mounted on the audio unit assembly. The audio signal inputs from the

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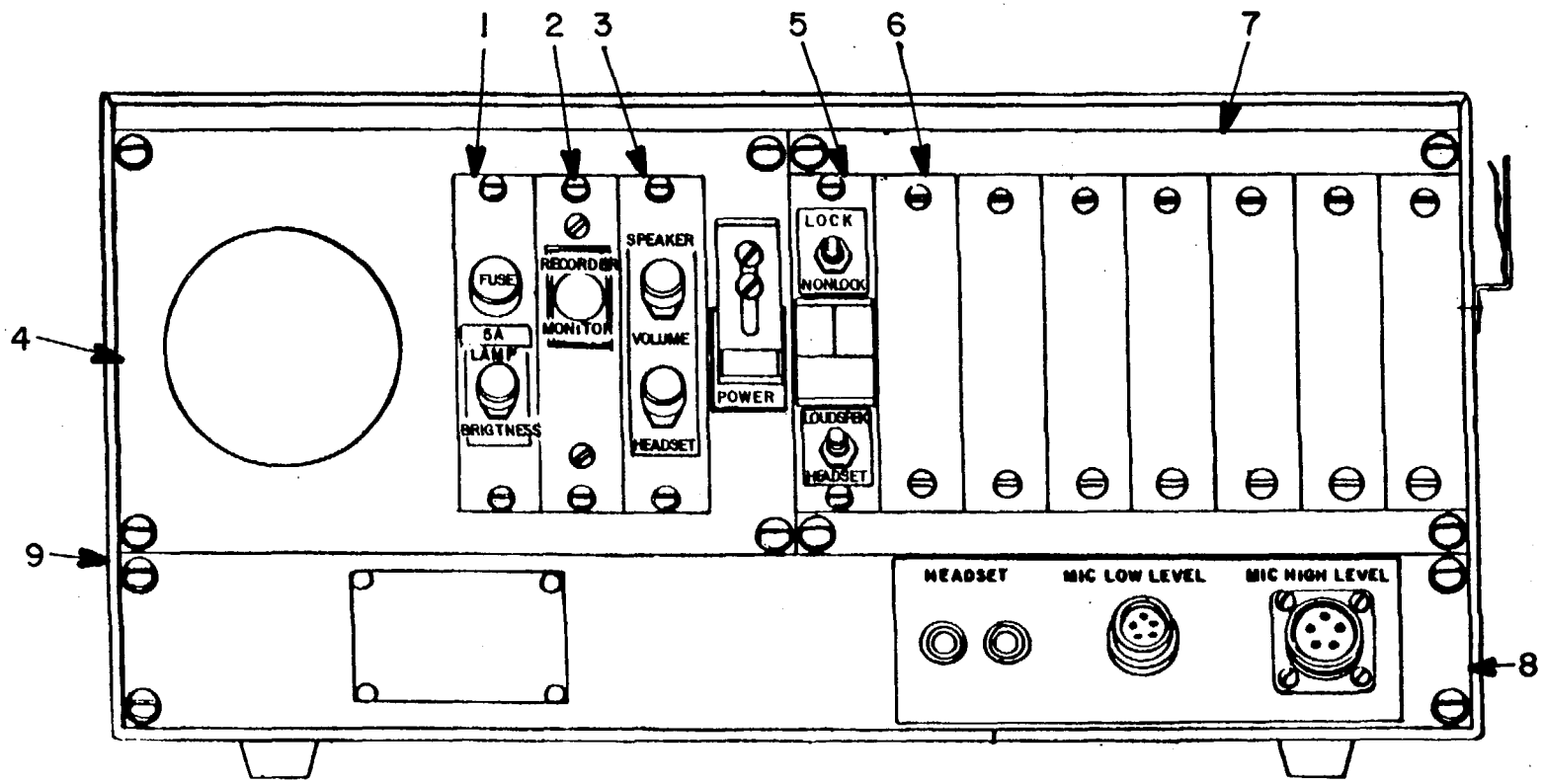

Figure 1-1. Control, Radio Channel Console, Front View