

USER'S GUIDE
for the
SELECTAMP NBPCS-900-3
CHANNELIZED PAGING REPEATER

MANUAL NO. AE02B-A3659
REVISION --

The information set forth in this document and all rights in and to inventions disclosed herein, and patents which might be granted thereon disclosing, employing or covering the materials, methods, techniques or apparatus described herein are the exclusive property of Andrew Corporation.

This document is an operation and maintenance manual. No disclosure or reproduction of the information or drawings shall be made of any other purpose without the prior written consent of Andrew. Use of the information contained herein to fabricate or assemble any item in whole or in part is expressly prohibited.

These goods are subject to U.S. Department of State, International Traffic in Arms Regulations, 22 CFR 120-130.



2601 Telecom Pkwy, Richardson, Texas 75082
TEL (972) 952-9700 FAX (972) 952-0019

LIST OF EFFECTIVE PAGES

Dates of issue for original and changed pages are:

Original.....O 9 June 1999

**TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 18
CONSISTING OF THE FOLLOWING:**

Page	Change No. (O = Original Page)
Title Page	O
List of Effective Pages (i)	O
Safety Summary (ii)	O
Table of Contents (iii)	O
Chapter 1 (1-1 thru 1-3)	O
Chapter 2 (2-1)	O
Chapter 3 (3-1 thru 3-5)	O
Chapter 4 (4-1)	O
Appendix A (A-1)	O
Appendix B (B-1 thru B-3)	O

SAFETY SUMMARY

High voltage is used in the operation of this equipment. Death on contact may result if personnel fail to observe the following safety precautions:

- Do not be misled by the term "Low Voltage." Potentials as low as 50 volts may cause death under adverse conditions.
- Do not crush, puncture, disassemble, or otherwise mutilate batteries. Leaking batteries can cause serious damage to equipment and injury to personnel.
- Do not remove covers or access plates on the equipment unless you are authorized to do so.
- Do not work on electronic equipment unless there is another person nearby who is familiar with the operation of the equipment and is trained in administering first aid.
- Whenever possible, disconnect the equipment from the power source before beginning maintenance.
- To prevent electrical shock or damage to the equipment, do not operate it until you thoroughly understand the operation and function of all controls, indicators, and connectors.
- Turn off all power to the equipment before replacing any fuses.

FIRST AID

In case of electrical shock:

- Do not try to pull or grab the individual.
- If possible, turn off the electrical power.
- If you cannot turn off the electrical power, pull, push, or lift the person to safety using a dry wooden pole, a dry rope, or some other insulating material.
- Send for help as soon as possible.
- After the injured person is no longer in contact with the source of electrical shock, move the person a short distance away and immediately administer first aid and artificial resuscitation as required.

TABLE OF CONTENTS

CHAPTER 1 DESCRIPTION	1-1
1.1 OVERVIEW	1-1
1.2 ELECTRICAL SPECIFICATIONS.....	1-1
1.3 MECHANICAL SPECIFICATIONS	1-2
1.4 ENVIRONMENTAL SPECIFICATIONS.....	1-2
1.5 TECHNICAL ASSISTANCE	1-2
CHAPTER 2 OPERATIONAL OVERVIEW	2-1
2.1 OVERVIEW	2-1
2.2 RF DISTRIBUTION	2-1
2.3 POWER DISTRIBUTION.....	2-1
2.4 CONTROL/ DISTRIBUTION.....	2-1
CHAPTER 3 FUNCTIONAL DESCRIPTION.....	3-1
3.1 OVERVIEW	3-1
3.2 FUNCTIONAL DESCRIPTION	3-1
3.2.1 Diplexer	3-1
3.2.2 Broadband Module	3-1
3.2.2.1 LNA/Splitter	3-1
3.2.2.2 Combiner.....	3-1
3.2.3.3 901 MHz Reverse Channel.....	3-2
3.2.3 Channelizer	3-2
3.2.3.1 Downconverter	3-3
3.2.3.2 Upconverter.....	3-4
3.2.3.3 Synthesizer.....	3-4
3.2.4 Power Supply	3-4
3.2.5 Control/Distribution.....	3-4
3.2.6 Power Amplifier Modules.....	3-4
3.3 PROGRAMMING.....	3-5
CHAPTER 4 MAINTENANCE.....	4-1
4.1 MAINTENANCE PROCEDURES	4-1
APPENDIX A EQUIPMENT LIST AND INSTALLATION.....	A-1
APPENDIX B CONTROL SOFTWARE.....	B-1

LIST OF FIGURES

Figure 3-1 SelectAmp NBPCS-900-3 Outline Drawing, front veiw.....	3-2
Figure 3-2 SelectAmp NBPCS-900-3 Outline Drawing, rear veiw.....	3-3

LIST OF TABLES

Table 1-1 Electrical Specifications	1-1
---	-----

C:\MyFiles\UsersGuides\Paging Repeater\CHAPT_1.doc

C:\MyFiles\UsersGuides\Paging Repeater\CHAPT_3.doc

C:\MyFiles\UsersGuides\Paging Repeater\CHAPT_4.doc

C:\MyFiles\UsersGuides\Paging Repeater\App_A.doc

C:\MyFiles\UsersGuides\Paging Repeater\App_B.doc