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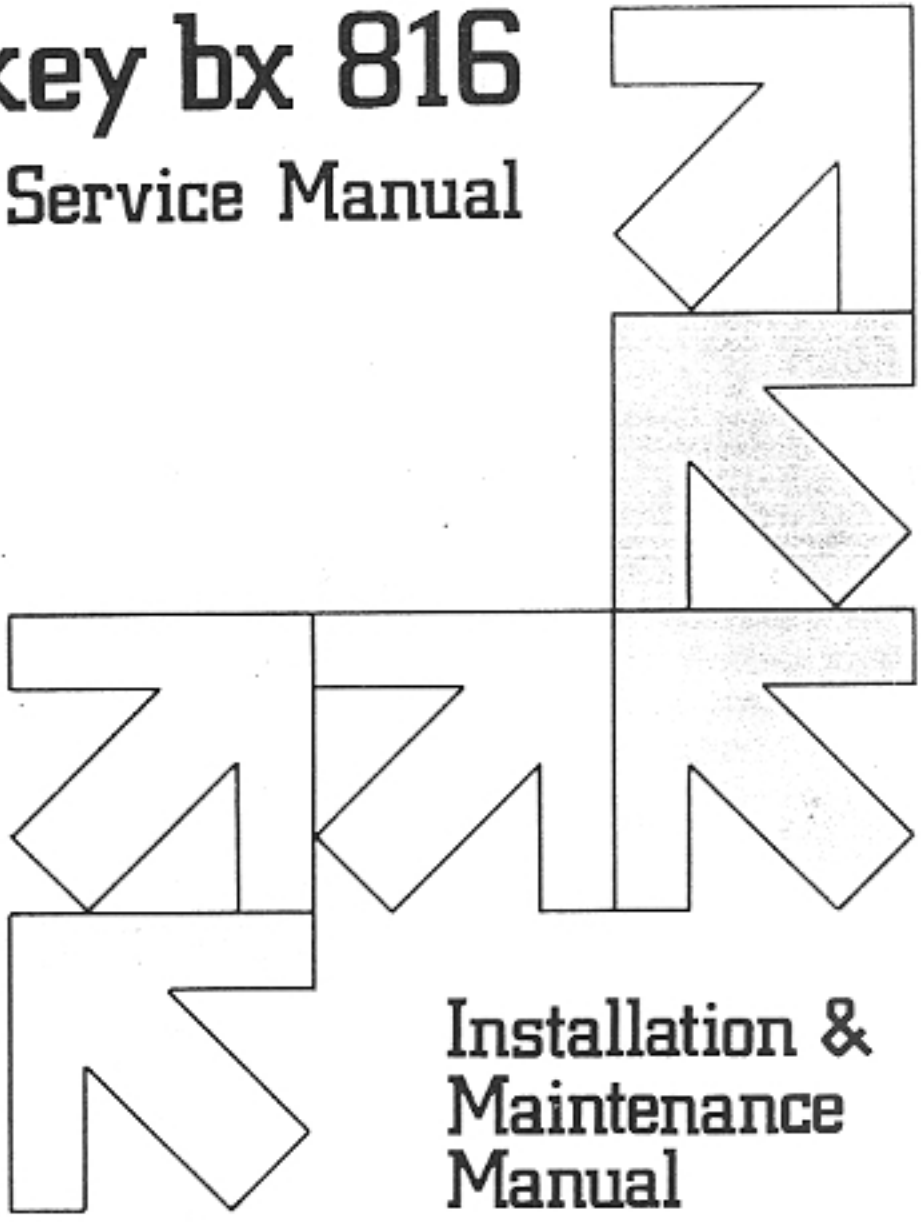
key bx 816

Customer Service Manual



Installation & Maintenance Manual

Telrad

NOTICE

This manual is applicable to the **key bx** 816 software version C. Telrad, Ltd., reserves the right to make changes in the equipment described, and in this manual, without notification. However, changes in the equipment do not necessarily render this manual invalid.

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Section 1
INTRODUCTION

1.1 Purpose of Manual

This manual describes the 816 telephone installation methods and test procedures.

In addition to this manual, the following documentation is available:

- System Description, including detailed descriptions of features and services, and special applications.
- Operating Instructions. This manual, primarily for trainers and sales personnel, has complete instructions for operating stations, Single-Line Telephone (SLT) extensions, the attendant console, and for using the exchange with Value Added Networks (VAN).
- Configuration Guide, with instructions for hardware installation planning and configuring all features using the attendant console.
- System Owner's Manual. This booklet contains basic information for the system owner.

1.2 Manual Changes

The reasons for future issues of this manual will always be written in this Section.

1.3 Tools and Test Equipment

No special tools are required for installation of the exchange. The KSU can be assembled and installed with standard screwdrivers, pliers, and carpentry tools for wall-mounting. You may need a wire-wrapping tool, or spring-loaded punchdown tool for connecting the Main distribution frame -- the tool you need depends on the type of distribution frames you use (66M150 blocks, which are standard in the United States, require a spring-loaded punchdown tool). For system testing and maintenance, you need an ac/dc multimeter. You may use a tone generator for testing CO lines, though it is not required.

Section 2
INSTALLATION COMPONENTS

2.1 Equipment List

A fully equipped installation comprises the following parts:

- basic Key Switching Unit (KSU), with the cover, base, and Main Card installed. The Main Card has connectors for the power supply, expansion cards, impulse dial card, and one 25-pair telephone connector for four stations and two trunks. A lithium battery is provided for installation on the card;

- up to three Trunk-Line Cards (TLC). Each TLC may be replaced with TSC for Single-Line Telephone (SLT) extensions, or a TOC for Off-Premise Extensions (OPX). Each card has two ribbon cables which connect to the Main Card, and a 25-pair connector for four extensions (stations for TLC, SLTs for TSC or TOC) and two trunks, connected through the Main Distribution Frame;

- one Option Card. Several models of option card are available. The card has a ribbon cable for connection to the Main Card, and a 25-pair connector leading to the Main Distribution Frame for connection of optional equipment, such as a music source for music on hold. The card may also have a 25-pin RS-232-type connector for a printer;

- one Impulse Dial Card. This card attaches to the Main Card if the ID option is required;

- telephone stations: up to four connect to the Main Card, and up to four additional stations connect for each TLC;

- Single-Line Telephones (SLTs): four for each TSC/TOC. SLTs may be DTMF or impulse dial (type 500 or 2500);
- one Direct Station Select (DSS) console. If installed, it replaces station 21;
- interconnect equipment. Table 2-1 shows the interconnect equipment required for an installation;
- hardware for fastening KSU and other equipment to walls;
- Power Supply. One supply is required for each exchange. Two types of power supplies are normally used -- Elgin and Telkoor;
- Optional ring generator if SLTs are installed.
- Optional 48-V power source if Off-Premise Extensions (OPXs) are installed.

For a more detailed functional description of the main components, see the Configuration Manual.

2.2 Interconnect Equipment

The following interconnect equipment is required when installing the 816.

- one voltage spike protector;
- five male amp ends;
- four 89B brackets;
- four 66MI-50 connecting blocks.

For each station to be installed, you also need the following:

- one connecting cord;
- one flush mount connecting block, or
- one surface mount connecting block.

All cabling is 24 AWG.