CHAPTER 1
INTRODUCTION TO THE TK50

The TK50 is a powerful streaming tape drive which can store 94 million bytes (characters) on each of its associated tape cartridges (formatted). It runs with Digital computer systems such as the MicroPDP-11 and MicroVAX II. While the TK50 is physically small, it has much of the functionality of Digital's larger magnetic tape drives, such as the TU81.

Since the TK50 is a relatively new type of device, how to use it may not be immediately obvious. You should read this manual completely first, then perform the procedures in Chapters 2 and 3. The TK50 Tape Drive Subsystem User Reference Card (EK-OTK50-RC) is provided as a reminder after you become comfortable with using the drive.

The TK50 uses a tape cartridge (labeled CompacTape) that contains the magnetic tape on a single reel. This is an important concept to understand, because it directly affects the use of the TK50. The magnetic tape is the medium that stores the data.

When the tape cartridge is loaded into the drive, the tape is automatically threaded onto a reel inside the drive. If the tape is fully wound onto the reel inside the drive, it can take up to 90 seconds to rewind. It must be fully rewound into the cartridge before the cartridge can be removed.

This method is different from a video cassette recorder (VCR) in that a VCR tape can be ejected at any time -- it does not have to be rewound first.

Two main components make up the TK50 Tape Drive Subsystem: the TK50 Drive Unit, and a single printed circuit board controller that plugs into a host computer system (such as the Micro/PDP-11). The controller provides an interface between the tape drive unit and the computer's central processor. An interface cable connects the tape drive to the controller.