Description

1.1. Overview

PC-3000 is the software companion to Laser Precision Corporation's TD-3000 Optical Time Domain Reflectometer (OTDR), shown in Figure 1-1. With PC-3000 operating in your computer, you can perform all the measurement and analysis functions found in the TD-3000, but in the comfort and convenience of an office or laboratory environment. This allows centralized data storage, analysis, and trouble shooting of fiber optic systems.

PC-3000 is not limited to trace files collected by the TD-3000. It can also use traces from Laser Precision's TD-1000, TD-2000, TD-9950, TD-9960, and FF-1000 series.
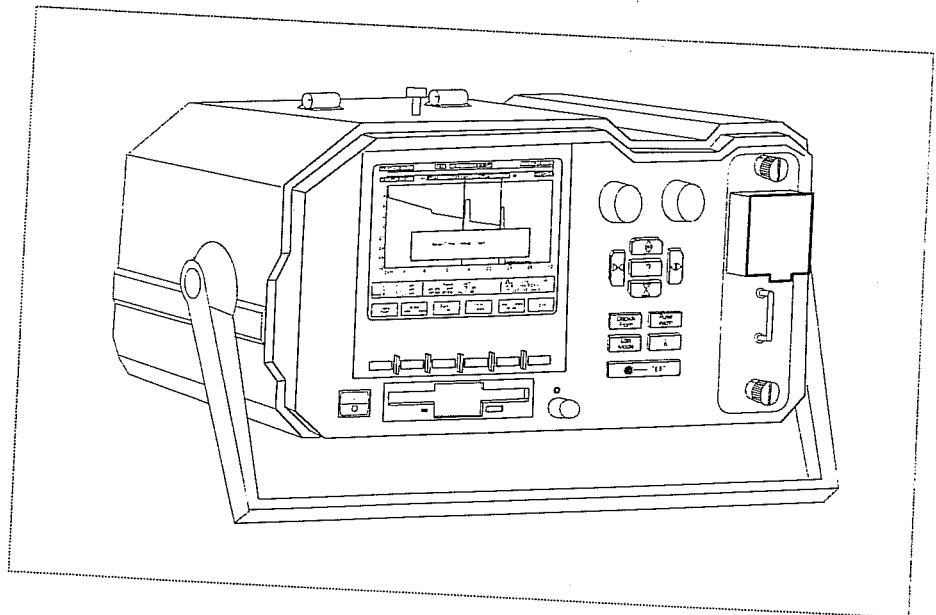

Figure 1-1.   TD-3000

1.1. Overview (continued)

OTDRs and Feature Finders fire short pulses of light into a fiber and analyze the light reflected back to the optical receiver. This reflected light is compiled as a trace profile of the fiber. PC–3000 uses trace profiles that have been stored by these devices.

When a trace is displayed by PC–3000, it appears as shown in Figure 1–2. The grid on the display shows power (dB) vertically and distance horizontally. The attenuation of the optical power in the fiber appears on the display as a downward sloping line from left to right. The slope is proportionate to the amount of attenuation in the fiber. Spikes, or reflections, appearing on the display are a result of Fresnel reflections. Abrupt drop-offs in the trace, or steps, are typically the result of fusion splices or macrobending.

Figure 1–2 shows a TD–3000 trace that was compiled with a TD–385 Optical Module. The module that was used is identified in the Trace Characteristics Window just above the **MORE**F6 function key, accessed by clicking the *right* mouse button while the mouse cursor is in the shaded area above the F6 key.
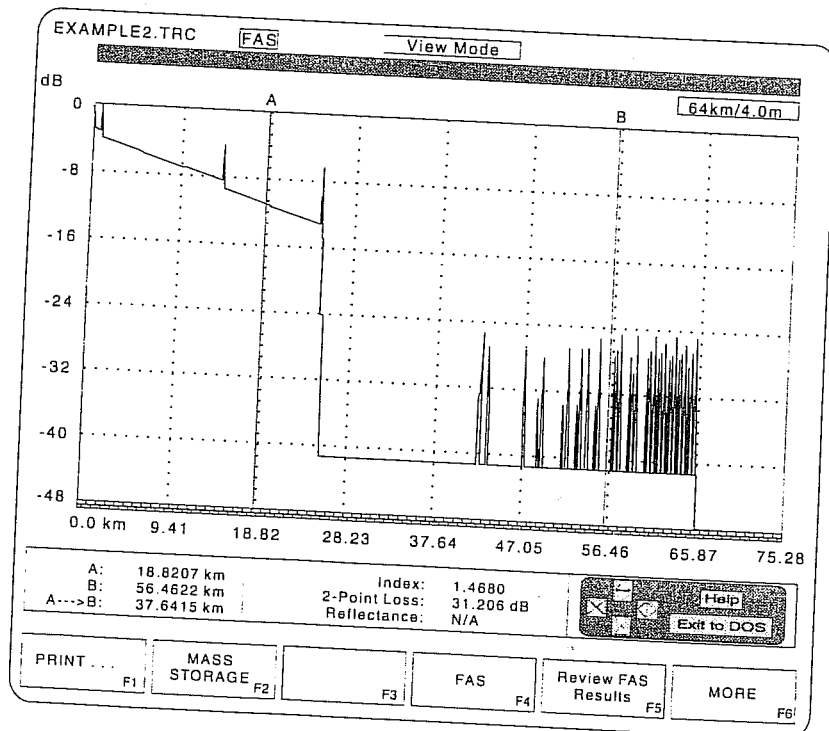

Figure 1–2. Sample Trace Display