UNDERSTANDING OTDR's

Using test instrumentation to test your fiber optic cable plant without understanding how they work can be disastrous. While today's instruments are accurate and easy to use, they all require adequate knowledge of their operation and "quirks" to get good data. As an example, we have seen several instances where users of OTDRs (optical time domain reflectometers) accepted the automatic results of the instruments without evaluating the displays (or perhaps not knowing how to interpret the displays.) The data was highly misleading and the consequences of the bad data was very costly. The reason was simply that the OTDR was being used outside of its normal operating parameters and the interpretation of the display is critical to understanding what is happening in the cable plant.

In this section, we will examine the OTDR in detail and show examples of good and bad data. Then we will try to give you guidelines on using them.

If you are going to use an OTDR, make sure you read the manufacturer's manual thoroughly - until you understand it fully. That will help you operate the unit properly. Much of the information here is not included in the manual, which generally only tells you which button to push. This article will help you understand how the instrument works, how to interpret what it is measuring and keep you from being misled by it.

Advanced Fiber Solutions, Inc.
Fax: (617) 507-0784
Ph: (508) 238-7100
19 Norfolk Ave, Easton, Ma, 02186, USA
email:info@afs-i.com
url:www.afs-i.com