

	<p><b>KEY FEATURES</b></p> <ul style="list-style-type: none"> <li>▶ Operating System Independent</li> <li>▶ Auto detects All USB Ports and Hubs</li> <li>▶ Individually Tests All Existing USB 2.0 Ports</li> <li>▶ On-board Processor</li> <li>▶ Burn-In</li> <li>▶ Measures USB Vcc</li> <li>▶ Full-Speed/High-Speed USB Test</li> </ul>
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**DESCRIPTION**

The ELK-HD-USB2.0 is designed to quickly and accurately troubleshoot the proper operation of Hi-Speed USB ports. This test loop-back device is compliant with Hi-Speed USB specification 2.0 and is self-contained tester to individually test all existing Hi-Speed USB ports. Unlike other diagnostics that provide a parallel or serial to USB loop and test for simple O/S dependent operation, The ELK-HD-USB2.0 uses its own hardware to create a USB test device to accurately test Full/Hi-Speed operations in loop-back mode and capable of precise power measurements. This ability makes this device a much more accurate and complete testing of USB 2.0 ports. The ELK-HD-USB2.0 also uses direct communications and does not rely on the Operating System to conduct its testing. This function helps the user determine if the problems with the USB 2.0 ports are hardware / design related or are device driver related. Unlike other USB Port Testers, ELK-HD-USB2.0 is more than just a USB Loop-back. ELK-HD-USB2.0 is a true diagnostic package that will run your system's USB 2.0 Ports through vigorous routines to detect failing components. ELK-HD-USB2.0 uses hardware and software to perform its diagnostics functions. One of ELK-HD-USB2.0 many advantages is that it is self-booting. To run the software, simply insert the ELK-HD-USB2.0 diskette and turn on the computer. The program loads itself before any operating system (e.g., DOS, WIN 9x/ME/2000/XP etc.) is loaded. Thus, ELK-HD-USB2.0's tests are conducted without the interference of an operating system or any other programs (TSRs) that may be loaded into memory during the boot sequence (such as device drivers or various operating system commands, etc.). Direct testing allows the highest degree of accuracy and testability without interference. ELK-HD-USB2.0 is fully automated. Simply attach the USB 2.0 module and boot the diagnostic software. Once the software is loaded it performs a USB detection and connection confirmation routine. Upon determining that the USB 2.0 port is available and ELK-HD-USB2.0 module is ready to communicate, the software initiates a sleuth of tests to determine any errors. ELK-HD-USB2.0 is a perfect tool to determine the proper operation of the USB 2.0 ports and the compatibility of the ports with most USB peripherals. ELK-HD-USB2.0 tests include: checking operation of USB port at Full-Speed (12 Mb/s) and Hi-Speed (480 Mb/s), Setting address commands, Resetting port, Measuring Vcc, and initiating USB 2.0 Data Transfer. The complete set of diagnostics takes less than a minute. However the diagnostics are designed to run continuously for thorough burn-in testing. The USB 2.0 module also supports hot swapping to quickly test all Hi-Speed USB 2.0 ports available. ##When used with our other tools such as ELK-PCI-PHD series or ELK-SD-PRO, it incorporates complete Hi-Speed USB 2.0 port testing as part of a complete system Burn-in diagnostics.

**SPECIFICATIONS**

**Operating System Independent**

The ELK-HD-USB 2.0 utilizes Self Boot Technology(SBT) to eliminate the need for any operating system. Simply insert the diskette and turn on the computer.

**Auto detects All USB Ports and Hubs**

New auto detect mode automatically locates the USB 2.0 port that ELK-HD-USB2.0 is installed.

**Individually Tests All Existing USB 2.0 Ports**

Tests the actual port and its controller through establishing communications with the ELK-HD-USB2.0 and sending and receiving information. Also measures USB Vcc.

**On-board Processor**

To perform real-time active tests that surpasses and outperforms a basic USB look-back function.

**Burn-In**

For unattended Burn-In. New script writing allows you to program the specific tests, duration per test, and report generation capability.

**Measures USB Vcc**

Measures the USB voltages on the screen. Measurements are displayed in Minimum, Current, and Highest Value. This will insure proper burn-in testing and USB power flow. Also checks for short duration spikes on USB lines and for out of spec noise.

**Full-Speed/High-Speed USB Test**

Sets USB test for Full-Speed and High-Speed data-transmission.

**Device Connection Confirmation**

Runs a series of patterns to verify the connection of the Data Bus, System I/O read and write strobes and addressing required to access the USB registers.

**USB Specification 2.0 Compliant**

**ORDERING INFORMATION**

MODEL	DESCRIPTION
ELK-HD-USB2.0	ELK-HD-USB2.0 will perform internal and external testing on High-Speed USB 2.0 ports using ELK-HD-USB2.0 device. This test device is compliant with USB specification 2.0 and is self-contained tester to individually test all existing USB 2.0 ports.

All Specifications within this document are subject to change without notice.



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