

MOHR™ IEEE-1394b Firewire Automated Test Set

Automated testing of 1394b/AS5643/Firewire data bus cable assemblies



KEY FEATURES

- Differential Adapter for single-ended TDR
- Optimized for use with MOHR™ CT100B TDR Cable Analyzers
- Automated, High Resolution Distance to fault measurements
- Detect, Localize and Type both “Hard” and “Soft” Faults
- Manually or software-controlled switch between data pairs
- Small, lightweight and rugged
- Internal Battery or USB powered (60+ hour battery life)

MOHR CT100-DA-1394

IEEE-1394b Firewire Automated Test Set

The MOHR CT100-DA-1394 Automated Test Set works with the MOHR CT100B TDR Cable Analyzer to rapidly and accurately detect both subtle and gross faults in IEEE 1394b/SAE AS5643/Firewire cabling systems.

MOHR’s Differential TDR signal adapters create a high-resolution differential TDR signal that matches the systems under test. The MOHR CT100-DA-1394 provides more accurate, high-resolution cable impedance measurements.

The CT100-DA-1394, either manually or via the control of a CT100B, can switch between the data pairs in the cable being tested.

Specifications

Switch Lifetime	50,000 by pushbutton;
Actuations	1,000,000,000 software controlled
Frequency Range	DC to 1200 MHz
Input Connectors	MMCX + Optional USB data & Power
Output Connector	9 Pin 1394b Firewire
Enclosure	Rugged Aluminum Case
Dimensions	3.25L x 1.75W x 1.0H inches (8.3 x 4.5 x 2.6 cm)
Weight	2.9 oz (82g)
Temperature	0C to +70C
Battery	500mAh Li-ion (60+ hour battery life); 80% life remaining after 4 weeks

Example Application:

Automated mask testing of two-pair 1394b cable harnesses

The CT100B has a feature called Mask Testing which allows rapid, automated analysis of a 1394b cable harness. A known good trace is used to establish a boundary mask, setting acceptance and rejection criteria as simple offsets from a standard.

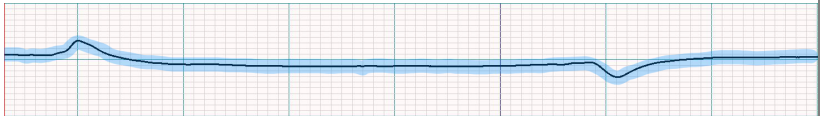


Figure 1. 1394b data pair TDR Cable Trace with simple Masking applied.

Figure 2 illustrates multiple data pair TDR traces from the Figure 1 masking example. TDR traces that are acceptable are displayed in green, those that fall outside of the masking boundary are shown in Red.

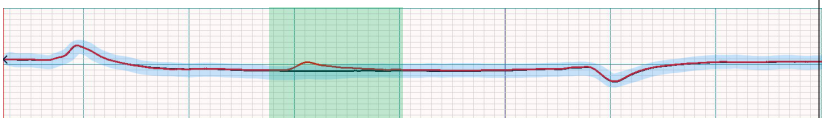
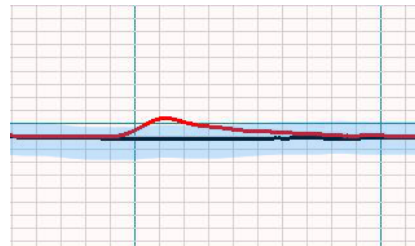


Figure 2. Accepted and Rejected 1394b data pairs, tested against masking.



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