

The Importance of a Structured Cabling Tester *Identifying a fault and its location at the same time*

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The growth in network and communication systems has increased the demand for organization's to implement a detailed well-organized structured cabling infrastructure. The need to store information centrally continually increases as advancements in technology continue to develop. Organizations need to be wired for sharing information centrally as well as for voice and data storage and retrieval. Telecommunications and data communications are becoming more complex. This continuous increase in technology adds to the complexity of a structured cabling system and the importance to manage its infrastructure.

A key tool in implementing an internal cabling system, which is designed, managed and controlled effectively, is a Structured Cabling Tester, or Wire Map testers as they are often called.

The process of pulling cables and completing the trim outs will, without a doubt, incur some faults. They will consist of opens or shorts resulting from wire damage during the pulling operation or crossed, reversed, open or shorted terminations during the trim out operation.

There are numerous models available on the market today offering a host of similar features. They are all generally able to advise the operator of these common faults, such as shorts, opens and pair reversals, with some able to identify the more elusive split pair faults, and several able to measure the installed cable length.

The majority of Structured Cabling Testers, having established that the installed network link is faulty; the operator has no idea where the fault lies. The operator has great detail as to what the fault is, which is actually irrelevant since all faults once located will require a complete re-termination of the associated connector, but with no idea which end is faulty.

Why waste time?

If using a Structured Cabling Tester which only indicates a fault, but not its location can be costly. For example that there is a short between wires 1 and 2, the operator sets about examining the termination at one end to find out if it is the faulty end.

What are the chances of the fault being located the first time? Fifty percent. The fault is just as likely to be at the other end of the installed link. Both time and money have now been wasted.



Solution

The operator should use a tester, which has the ability to measure and indicate the length of the cable under test, using a Vp (Velocity of Propagation) set by the user, as well as the ability to identify the nature of a fault and its location. This type of tester will reduce the time taken to locate and rectify the fault, and thus provides significant installation cost savings.

Knowing where the fault is enables the operator to go straight to it, saving vast amounts of time, increasing productivity, and reducing installation costs.

