

Additional Transmission Performance Guidelines For 100 4-pair Category 5 Cabling

TSB95 outlines minimum recommendations for the new channel parameters of Return Loss and Equal Level Far-End Crosstalk (ELFEXT). These Return Loss and ELFEXT recommendations are specified to ensure the support of Gigabit Ethernet over installed or “legacy” Category 5 cabling and were derived from worst case performance of channels with only two connection points. The two-connector channel topology is consistent with the IEEE committee’s assumption that cabling used to support Gigabit Ethernet systems will most likely utilize an interconnect instead of a cross-connect field and will not include a consolidation or transition point connection. Existing installed Category 5 cabling should be verified to ensure that performance meets the minimum recommendations of this document. Channel configurations with three or four connectors that meet the specified ELFEXT and Return Loss recommendations will also support Gigabit Ethernet. Because the specifications of this document are applicable for the qualification of existing, installed cabling only, they are not recommended to be used as the minimum performance criteria for new Category 5 cabling.

Originally balloted as an addendum, this document was published as a Technical Systems Bulletin (TSB). This document is informative in nature and does not contain mandatory or “shall” requirements.