CABLE ASSEMBLIES

MODE CONDITIONING PATCHCORDS

Mode Conditioning Type	Order Code
62.5/125µm ST to SC	MC-B-02-33-41-X
62.5/125µm SC to SC	MC-B-02-41-41-X
62.5/125µm ST to ST	MC-B-02-33-33-X
62.5/125µm MT-RJ to ST	MC-B-02-19-33-X
62.5/125µm MT-RJ to SC	MC-B-02-19-41-X

When using multimode 62.5/125µm optical fibre for transmitting Gigabit data over distances greater than 300 metres, a Mode Conditioning Patchcord must be used at each transmitter/receiver. This is because when a single mode laser is launched into the centre of a multimode fibre it may cause differential mode delay (DMD) effects that generate multiple signals. The Mode Conditioning Patchcord overcomes this problem by launching the laser light from the transmitter into a single mode fibre which is aligned with a precise offset from the centre of the core of a 62.5/125µm fibre in the "mode conditioning" part of the patchcord. The output from the patch cord is then compliant with the IEEE 802.3z standard for 1000Base-LX.

Mode Conditioning Patchcords are not recommended for short transmission distances - a few tens of metres - as bit errors may occur/increase.

Convention dictates that the Mode Conditioning Patchcord is identified each end as "To Equipment" and "To Cable Plant". The equipment end is typical of products offered by companies such as CISCO, and the cable plant is the connection made at a patch panel to the main fibre optic cable run.

Mode Conditioning Patchcords are between 2 metres and 5 metres in length. It is not practical to have these patchcords in lengths outside these limits.